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500 QUESTIONS ANSWERED ABOUT SWINE

L. H. COOCH

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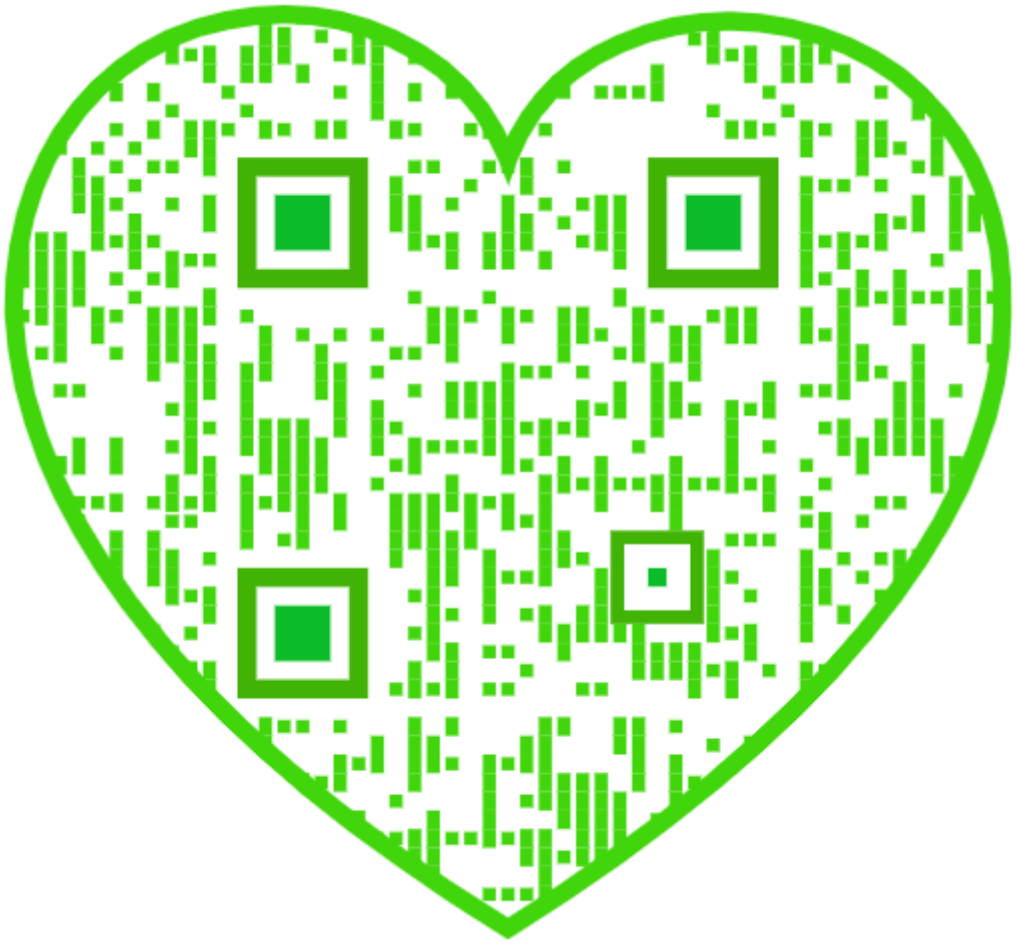

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FIVE HUNDRED QUESTIONS ANSWERED ABOUT SWINE

Being a Compilation of all the Questions Concerning the Breeding, Feeding, Pasturing, Diseases, Comparison of the Different Breeds and Miscellaneous Questions Asked and Answered About Swine, and Published in The Farmer from 1900 Until the Present.

BY

L. H. COOCH

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Preface.

Realizing the necessity for a swine book to which the farmer can turn and find his question answered without waste of time, we have collected and compiled the questions and answers contained in this book from the past issues of The Farmer from 1900 up to the present time and added to these a number of questions which we feel sure will be helpful to swine breeders. Although the title of this book is "500 Questions Answered About Swine," there are in reality 534 separate questions with their answers.

The book is subdivided and contains 83 questions and answers about breeding hogs, 150 on feeding, 51 on pastures, 143 on diseases, 29 on the comparison of different breeds and 78 miscellaneous questions.

Our aim has been to subdivide this book in such a way that anyone can turn to it and have his question answered in the shortest possible time. In placing it before the public we wish to state that the questions pertaining to feeding and pastures are intended largely for Northwestern conditions but there is much advice in these two subdivisions that in a general way could be followed to advantage by swine breeders throughout the country.

St. Paul, Minnesota, July 1st, 1907. L. H. COOCH.

Breeding.

Conformation of Brood Sow and Boar.

What should be the conformation of the profitable brood sow? Also of the boar?

Ans.: The brood sow to be a good breeder should be broad between the eyes to insure good disposition, long and deep in body, somewhat rangy, and her legs not too long, but strong. In other words, she should be a little coarse in her make-up. The sire may be a little more compact where the sow is ideal in type. The sire should show more finish.

Impotent Boar.

I bought a full blooded boar last fall. He weighs about 185 pounds and looks in the pink of perfection but he don't care anything for the sows.

Ans.: The boar may be impotent and incapable of service. There is nothing to recommend. If natural methods fail, there is something seriously wrong. You had better get another boar.

Trouble With Boar.

I have a fine improved Chester White boar and sow, both registered, and the sow in pig with him. A large lump has come on the boar under his throat which has broken and looks like a piece of raw beef. Can you tell me what it is and if it is safe to raise the pigs? There will be about fifty of his get altogether.

Ans.: The trouble with the boar may arise from one of a number of causes. It would be unsafe to say what the trouble is or what caused it without a more perfect knowledge of all the facts, but it is pretty certain that it is not of a character to affect the progeny. There need be no apprehension on this account.

Selecting a Boar.

In selecting a hog to head the herd should one be gotten with all the good markings?

Ans.: A breeder should look for these markings but for a person who is only making pork, he need not be so particular. A small red spot does not hurt a Poland-China. In breeding pure-bred hogs you have to make a discrimination to quite an extent, but for a man who is just producing pork, that doesn't count for anything. Packers pay no attention to color, but they like uniformity in a consignment of hogs and pay more for such a load than where they are of all sizes and colors.

Hogs for Market only.

I want to raise hogs for market. Is it necessary in such a case to have the very best, high priced boars that come up to scratch in every point?

Ans.: If the hogs are grown for market only, it is not necessary to pay a fancy price for animals which have every bristle of just the right color and pointing in exactly the right direction. It is well, however, to use only pure-bred boars. What the pork raiser should require in his boar is good form and size without coarseness, good feeding capacity and a strong constitution.

Age of Sire.

How long should a sire be kept and be a potent sire?

Ans.: Records show that a majority of sires which have left behind them noted sires and dams were all the way from eighteen months to five years old, and some sires have made a high record at the age of eight and nine years. If more sires were kept from the age of two to five years, such as have proven themselves good sires by their vigorous offspring, it would add considerably to the improvement of the swine. This also holds true with sows.

Breeding Age of Sire.

What about the age of the sire? How old should he be when used for service?

Ans.: He should not be used until fully matured. Never use a sire any longer than eight or nine months at a time; never use him to excess.

Use Pure-Bred Sires.

I have a number of very fine grade brood sows and know where I can purchase what I consider an especially fine boar. However, he is only a grade. Would it be advisable to use this boar or should I get one that is pure-bred?

Ans.: To raise and maintain the standard use only pure-bred sires. Do not put too much faith in the outward appearance of grade animals. Little dependence can be placed upon outward appearance, and they will not transmit with any degree of certainty their own characteristics. By all means use pure-bred sires.

Better Blood Needed.

I have been breeding common hogs for a number of years and each year they seem to be a little less healthy and I have more trouble in getting them in condition to sell. What can I do to bring them back to a normal condition? I cannot afford to buy pure-breds, as I am raising hogs simply to sell to the butcher. What would you advise me to do?

Ans.: Use pure-bred sires to build up the grade. Life is too short to be spent in breeding scrubs.

Correcting Weak Points in the Boar.

Will it be safe to use a boar with weak

points on a sow that is generally strong where he is weak?

Ans.: A boar that has weak points can often be used with success on a sow which is unusually strong where the boar is defective, though a weakness in the boar is not counter balanced as readily as one in the sow, on account of his greater prepotency.

Pure-bred Boar or Sows?

I am new to the hog business. Which would be better to buy, a pure-bred boar or an ordinary boar and pure-bred sows? I am going to raise hogs for pork only.

Ans.: As the boar gives half the blood to the whole herd, while one sow can influence only her own litter, it is highly important that, whatever the sows may be, the boar should be pure-bred, and one which will give vigorous pigs of good form.

Age of Breeding Swine.

Which is better, an aged boar on young sows or a young boar on matured sows?

Ans.: An aged sow mated with a young boar will produce pigs which will mature earlier than those produced when the sow is young and the boar aged. This is a strong argument in favor of keeping a sow as long as she continues to breed satisfactorily.

A Bad Sort of a Breeder.

I have a pedigreed boar, but he has a long head, neck and legs. Would you use him for breeding or is he the right type?

Ans.: The animal described has a form that will require a large amount of feed to produce a pound of meat and one that will not finish for market until he has reached considerable age. He would be likely to transmit these bad qualities to his offspring so you had better get another boar.

A Bad Grazing Type.

I have a boar that walks partially on his dew claws. Would he be a good hog to head a herd?

Ans.: You had better not breed from him. The fact that he walks partially on his dew claws shows a weakness of frame, and indicates a poor grazer and an animal which will break down before he reaches a heavy weight.

Buying a Boar—The Age.

My neighbor has some fine young boar pigs about two-and-a-half or three months old. Should I buy one now or are they too young to tell how they will turn out?

Ans.: Boars should not be purchased until they are five or six months old. They do not show sufficient form before that time to give an accurate idea of how they will turn out when fully grown. They cost less at weaning time, but their purchase at this time is a lottery.

Time to Buy a Boar.

Should I wait until I need the services of a boar before I buy one or is it better to have him on hand some time before needed?

Ans.: It is not safe to delay the purchase until the boar is wanted for service. The service is more sure and the boar can be handled with much less trouble if he has been on the place for a few days before he is needed for use. He should have time to become accustomed to his new quarters before going into service.

Boar Running With Sows.

Shall I let my herd boar run with the sows all the time or keep him by himself?

Ans.: The boar should never be allowed to run with the sows, as he will be a continual worry both to them and to his owner, and it is much better to keep him in a lot where he can neither see nor hear other hogs.

Pedigreed Scrub.

I have a boar with a long pedigree behind him, but as a breeder he seems to me a poor animal. Would it be advisable to use him and trust to luck and his ancestors to produce good pigs?

Ans.: A poor specimen of a pure-bred animal is little better than a scrub, and should not be used simply because he has a long pedigree.

Boar Pigs Not Up to Standard.

I have a lot of boar pigs that are not quite up to standard in some unimportant particulars. Could they be sold as strictly first class animals? Would they stand a chance in the show ring?

Ans.: With even slight defects such animals would stand a poor chance in the show ring, but breeders are often glad to get such animals as they are just as good as any where pork and not show is wanted. They would insure better pigs than could be expected from equally well-formed grades or inferior pure bloods.

Handling the Boar.

I have a three-year-old boar that is a good getter but he is very thin all the time and often seems to lose his appetite. Should I use him for a breeder?

Ans.: You can't afford to raise pigs from animals which refuse to fatten, which are frequently "off their feed" or which have in any way shown anything but the most vigorous health. You had better dispose of him and try another.

Selecting a Boar.

I have a lot of little boar pigs that look too good to kill. Would it be advisable to keep one to breed to my old sows?

Ans.: It is usually better to buy a boar than to use one which has been raised on the place and is related to the sows which are to be bred. The introduction

of fresh blood will give larger litters and more vigorous pigs than can be expected from any close in-breeding.

Selecting Boars for Breeders.

I want to know something about selecting boars for breeders. I have some good litters and want to make the right selection.

Ans.: The breeders should be the squarest built and best shaped animals in the lot. They should be hearty eaters and should show a tendency to lay on fat rapidly.

Changing Boars.

What is the best way to start a herd of swine? I have two fine litters of mixed sexes. How often should I change boars?

Ans.: The breeding sows can usually be selected from those in the drove, but a new boar should be purchased as often as the sows have passed their prime and are replaced by the offspring of the old boar.

Selecting a Boar for Fattening Qualities.

How can I tell a boar that is likely to produce pigs that will readily fatten? I have some young boars and want to select one as a breeder.

Ans.: A short neck and short legs usually indicate good fattening qualities. They are even more important in the boar than in the sow. The boar should be small-boned for his size, but it is all important that his frame should have sufficient strength to carry him well on his feet.

Producing Healthy Pigs.

For a number of years I have been disappointed in my litters of pigs. My sows do not seem to be healthy. Is there anything I can do for them that will put them in such shape that they will bear healthy pigs?

Ans.: To obtain healthy, vigorous offspring, strong, active parentage is of the first importance. You had better fatten your sows and dispose of them, and select new ones for breeders. See that the boar is strong and vigorous.

Always Buy a Pure-Bred Sire.

I am just beginning in the hog business and find that pure-bred hogs are very expensive. I know where I can get a few very choice grade sows and also what I consider a very fine grade boar. Would it be advisable to make a start with grade animals or is it cheaper in the end to buy pure-breds?

Ans.: The man who is new to the hog business and who cannot afford to purchase pure-bred hogs, but at the same time wishes to improve his herd, should always buy pure-bred sires. The grade sows will be all right if they possess the characteristics and qualities for which they are intended. A grade boar, however, would tend to upset all of the breeder's calculations, as his ancestry would not tend to make him an animal that would produce better stock than himself or the sows with which he is bred.

Age to Breed.

Is a boar six months old, weighing 160 pounds and in good growing condition, old enough to breed to young sows the same age? We have fourteen sows.

Ans.: If the boar is a well developed animal for his age you need have no fear but what he is able to satisfactorily perform the services required of him, and even more if necessary.

Period of Gestation.

How long does a sow carry her pigs from the time of service?

Ans.: The period of gestation in hogs is from 111 to 113 days, although old sows sometimes carry their pigs from 112 to 117 days. In round numbers the period is sixteen weeks.

To Get Sows In Heat.

How can I make sows come in heat, and will it make any difference in the number of pigs, if bred after such treatment?

Ans.: For a sow weighing two hundred pounds, give one quart of wheat for three successive feeds. This will leave no ill effects and is said to do the work. Feed well and keep in good condition.

Bringing Sows Into Heat.

Is there any way to bring a sow into heat? I have one that I have wanted to breed for nearly two years but she does not come in heat.

Ans.: There is nothing to give in this case that will not injure the animal. Allow her to run with a male as much as possible. This is the best you can do. If she still refuses to come in heat, fatten her up and dispose of her to the butcher as soon as possible.

Penning Before Farrowing.

How long should a sow be shut up before she farrows?

Ans.: Perhaps three weeks. She knows her place and comes there, About two weeks before she farrows put her there continuously, especially at night. It is well to feed the sows roots or potatoes every day for five or six weeks before they farrow.

Care of Brood Sow Before Farrowing.

I have a sow that I expect to farrow in a few weeks. Would it be safe to let her in the pen with the others or should I put her by herself? She is very heavy and I am almost afraid to worry her very much in her present condition.

Ans.: A week or ten days before the pigs appear put the brood sow in a pen by herself so that she will become used to her new quarters before farrowing. Handle her quietly as in her condition rough treatment might cause her to abort.

Shipping Pregnant Sows.

How near to the time of farrowing will it be safe to ship sows a long distance.

Ans.: It will depend largely on the distance which the animals are to be shipped and the presence or absence of a competent caretaker in the car. It is not very safe to ship a sow within three or four weeks of the time of farrowing.

Cross-Breeding.

Could good results be obtained from cross-breeding only one time?

Ans.: Very likely. If you are going to raise pork, select some pure-bred sows of the bacon type and cross them with a pure-bred lard-type male. This method has given very good results for one cross but it is dangerous to continue any further in this line.

Cross-Breeding.

If cross-breeding is continued, what are the results?

Ans.: If cross-breeding is continued for any length of time the hogs get smaller and smaller, instead of larger. It is a very dangerous system of breeding unless conducted by those thoroughly experienced in the work.

Cross-Breeding Hogs for Bone.

Is it wise to cross-breed hogs to keep up bone?

Ans.: It may be done but it is a very risky business. The first cross sometimes gives a good feeding hog, but it is not a good practice on general principles.

Exercise For Bone.

Would exercise grow strong bone?

Ans.: Exercise is an essential, and is quite necessary. But bone and muscle forming feed is of the first importance.

In-Breeding.

Is in-breeding to be recommended? If not, why not?

Ans.: Dr. Manley Miles, in a chapter on in-breeding, which is worthy of reflection by anyone who wishes to in-breed, says. "The most obvious objection to close breeding—and it is perhaps the only one of importance—is the difficulty of selecting animals that are free from constitutional defects and the danger arising from the tendency of such defects to become dominant in the offspring. It must, however, be admitted that it is an important means of improvement when judiciously practised and that it constitutes the only method known of securing an accumulation of slight variations in a particular direction that it may be desirable to retain and perpetuate. The greatest improvement in the form and quality of animals can only be made by those who possess the requisite knowledge and skill to enable them to blend and perpetuate all desirable variations through a system of rigorous selection and close breeding without impairing the constitution by an accumulation of undesirable characteristics."

Selecting Future Brood Sows.

I have a lot of young pigs among which are some very fine sows. I have been offered a good price for these sows but as I will need to replace some of my old sows, had I better keep these or take advantage of the price offered?

Ans.: When selecting the brood sows for next season spare those which have shown themselves to be good mothers. Do not be tempted by price or any other consideration to part with them as long as they will breed well unless they show indications of impaired usefulness. With regard to parting with your old sows, one good old brood sow is worth two young ones whose usefulness has not been proven. Attention to this matter would greatly increase the profits of growing swine.

Selecting Breeding Sows.

I have three sows with litters and I wish to go largely into the business. Shall I select sows from these litters or buy them from outside?

Ans.: If your hogs are good animals, true to type, the sows for breeding can be selected from the litters. As "like produces like" they should always be selected from large litters from sows which are good milkers and good mothers. Don't go outside to buy if you have good stock at home.

Poor Sows for Breeders.

I have several sows that refuse to fatten. Would they make good breeders?

Ans.: To save a sow for a breeder simply because she is not fat enough to kill when the others are, is one of the surest ways to secure inferior pigs. Give your sows a change of food, plenty of fresh water and some salt and charcoal, and you ought to be able to get them fat.

What Age to Breed Sows.

I have some young sows of splendid form. How old should they be before I breed them?

Ans.: No uniform rule exists in regard to the age at which a sow should be bred the first time, as more depends on the maturity of the animal than its age. Sows raised on the place may be bred when they are either eight or fourteen months old, and if fully developed the younger age is usually the better. A sow that has been carefully raised should weigh 200 pounds at eight months, at which age she should be sufficiently matured to produce a fair litter of vigorous pigs.

A Poor Sow for a Breeder.

I have a sow that has always had a small appetite. Would it be advisable to keep her as a breeder or should I fatten her off and select another?

Ans.: A sow that is not a good feeder will produce only small litters, will be a poor milker, and her pigs will never make the quick and even growth necessary for good profit. By all means sell her and get another to take her place.

Old Sows For Breeding.

Does it pay to keep old sows for breeding, rather than to sell them and keep only young ones?

Ans.: It generally does, as mature sows breed pigs of stronger vitality and stronger bone. The pigs grow faster and are less liable to disease where mature parents are kept. A mature sow would not have reached her age if she had not been a good mother and produced large, healthy litters of pigs. Such a sow that has been proven is certainly more valuable than a young one that has not been tried.

Breeding Age.

At what age should a young sow be bred?

Ans.: A sow should not be bred until she is eight months of age and even then it would be folly to attempt it unless she is a fully matured animal of the type desired.

The Brood Sow.

How should I select a good brood sow out of the herd for the coming season?

Ans.: "Like will produce like," is an old maxim, containing much truth. If one has sows that proved themselves good mothers in all respects, bringing for their first litters six or eight pigs, and raising them satisfactorily, it is always better to retain a sufficient number of such sows and from them select sows in turn. It will, if the selection is made with due care, in a few years establish a fine herd of sows upon which one can rely with some certainty for successful breeding, although one may have two or three distinct lines of sows bred by different boars. Of course, the aim should always be to increase the uniformity by the selection of boars. Always refuse vicious animals for breeding. A broad, short head, wide between the eyes, with drooping ears, and a mild, large eye, indicate good nature and contentment, but never mistake sluggishness or inactivity for good motherhood. A narrow, long, slim head, small, restless eyes, set close together, and long, large ears, indicate a vicious disposition.

Breeding Young Sows.

Is it wise to breed an old boar to young sows?

Ans.: Use fully matured males on sows of the same character in order to produce large litters of strong, healthy, vigorous pigs. Sows that have been developed will suckle better and raise more pigs than a young one will. But if circumstances are such that one is compelled to use a mature boar on young sows, it is well to use a breeding crate so that his weight is borne up artificially and does not injure the sow. As to the results of progeny from two extremes, the records speak favorably.

Re-Breeding Sows.

Would it be advisable to re-breed an old sow the third day after she farrowed?

Ans.: It is very risky to breed a sow the third day after farrowing. If she is expected to raise two litters a year her pigs should not be weaned until they are about two months old. A sow usually comes in heat in from one to two weeks after her pigs are weaned and if she is to be bred again she should be served at that time.

How Long Are Sows Profitable?

How long is it profitable to keep a brood sow? What is the average age to which they can be kept?

Ans.: They have been kept until over ten years old. Many are kept until six years old but the average age is about three years, because some of them are turned off after their first litter. The owner must settle this question for himself according to the number of pigs produced at a litter and the sort of a mother the sow makes. Many old sows are more profitable than a large number of young ones.

Age Limit of Sows.

What is the age of a sow when she ceases to be profitable?

Ans.: Ordinarily, sows cease to be profitable breeders after they are four or five years old, but some raise good litters after they reach eight or nine years. When a sow more than four years old fails to give good litters whenever due, she may as well be fattened at once.

Old Sows or Gilts?

Which is more profitable, an old sow or a gilt?

Ans.: An old sow which regularly raises large litters of good pigs is worth half a dozen untried gilts.

Milking Qualities of a Gilt.

I have some fine gilts. How can I tell if they will make good milkers?

Ans.: It is impossible to judge accurately of the milking qualities in a gilt, but usually a chunky, easy fattened, heavy-boned, and short legged sow is not

as good a milker as is the less attractive-looking one with a longer body, longer legs and somewhat less rounded sides. Above all, do not select sows for breeding purposes unless their dams were good milkers.

Correcting Defects in the Sow.

I have a sow that has a few defects but she is a good milker and a fine mother and I hate to part with her. Is there any other way out of the difficulty?

Ans.: Many defects of form in the breeding sow may, to a great extent, be corrected in her offspring by mating her with a boar which is unusually strong where she is weak. If the sow it too long-headed, long-necked and long-bodied, she should be mated with a boar having the opposite characteristics; if the sow has weak legs and her dew claws touch the ground, the boar should have unusually strong and straight legs; if the sow is sway-backed the boar should have his back well arched, etc.

Weaning Pigs.

What is a good way to wean pigs?

Ans.: Try the little fellows with some oats. See that they have their own trough with a thin milk and middling slop. If this is provided while they are still nursing it will help to wean them gradually and easily.

Weaning.

How old should pigs be at the time of weaning?

Ans.: Few farmers like to wean little pigs at all, unless they want to re-breed the sow; then, perhaps, when they are two months old. Let them wean themselves, but if you are going to wean them, shut the brood sow up and let the little pigs run out on the pasture and come in to the sow when they want to. The sow is fed dry feed and in a few days the pigs wean themselves. See that they have their own little trough where they can get some sweet milk until the weaning is over.

A Question in Weaning.

How is the best way to wean pigs?

Ans.: Give the pigs all the solid food they will eat up clean while sucking, and they will become accustomed to it gradually. When the time comes to separate them from the sow, at about the end of the eighth week, they will be so well prepared for the change that they will scarcely notice it.

Nursing Pigs.

How long should pigs be allowed to nurse the sows?

Ans.: Until they get ashamed of themselves. Don't be in too big a hurry to wean them, especially if the sow is a good milker. If the sow is to have two litters a year wean the pigs when they are a little over two months old, otherwise let the sow wean them.

Breeding Twice a Year.

Is it advisable to breed sows twice a year?

Ans.: As a rule, no. In a cold climate one litter is generally considered enough, though two litters can be had if the sows are given proper care. Such breeding should never be a practice if you are breeding from young sows. If they have gone through the strain of breeding and raising a litter they should not be exposed again, but everything should be done to perfect their health and growth. If you wish to breed two litters in one year take old sows to do it.

Two Litters a Year.

If two litters of pigs a year are desired what is the best time for them to be born and how soon after their birth in the spring should the sows take the boar?

Ans.: If two litters a year are wanted in a cold climate, September and March would be the best times for birth. With fall pigs coming in September there is still time for them to make considerable gains on pasture before winter sets in, if suitable forage has been prepared for them. This will make the production of pork much cheaper than when they come a little later and have to go on mill feed immediately after being weaned. When the second litter comes in March, by the time the little fellows are ready to wean or a little after they can be turned into a pasture of winter rye and will make good gains on this until other pasture is ready. When two litters a year are desired the sow should be re-bred two months after farrowing, which is generally the first heat after the pigs are weaned. When only one litter is desired, which some breeders consider the best plan in this latitude, the pigs may run with the dam much longer and the sow need not be re-bred for sixteen or eighteen weeks after farrowing.

Number of Litters a Year.

Should sows have one or two litters a year?

Ans.: This must be decided according to the breeder's convenience. When comfortable shelter is provided and good pasture can be secured, October pigs are usually as profitable as those farrowed in the spring. March and April pigs come at a season when they need little care and can be carried through the summer on pasture at a small cost. Sows of mature age are usually strong and should have no

trouble in raising two litters each year if they receive good care.

Number of Litters.

Is it profitable to raise more than one litter of pigs from a sow a year, and when should I breed her?

Ans.: It does not pay to kill the goose that lays the golden egg. A good brood sow is about as profitable an animal as a person can own, and one cannot push all sows for all that is in them. A young sow should not have two litters the first year, but the two-year-old sow can, as well as not, providing one has comfortable shelter, so as to have her farrow about March 1st. Then let the pigs nurse until May 10th. If she and her pigs have been liberally fed, she can be bred again in May, so as to farrow in September. But do not forget that the whole aim and secret is live growth, obtained from the greatest flow of milk. Therefore very liberal and judicious feeding must go hand in hand, and only the strongest and most vigorous sows should be used for this purpose.

One Litter Each Year.

I have decided that in this cold climate it is best to have but one litter a year. Under such conditions would it not be possible and also best to allow the pigs to stay on the sows a little longer than where two litters are raised annually?

Ans.: A prominent stockman struck the nail on the head when he said: "When only one litter of pigs is raised a year allow them to run with the old sow until they get ashamed and wean themselves."

Fall Litters.

Why do some farmers object to raising a fall litter?

Ans.: In the first place, some would not want to if they could safely, as they can see no money in fall litters. They claim that the pigs come too late to get any pasture the first year and are sold before they can get anything from them the next season. That means they have to be raised on grain alone, which makes pork very expensive. In order to raise the second litter the first litter has to be weaned very young unless they come early in March which injures them, and the second litter often so reduces the vitality of the mother that they are ready to take the first disease that is in the country. It has been claimed that more than 90 per cent of the hog cholera starts with the farmers who raise fall litters.

Spring or Fall Born Pigs.

When is a good time for the pigs to be dropped,—spring or fall?

Ans.: If only one litter a year is expected, just as soon in the spring as they can get out on the earth. Fall pigs, unless it be a few to take the skim milk, as a rule are unprofitable as they of necessity have to be raised on grain instead of pasture and are very expensive to grow.

Fall or Spring Pigs?

Which is more profitable, to have the pigs come in the spring and feed them up to 200 or 250 pounds selling them in the late fall, or to have fall pigs, winter them cheaply, just keeping them growing, turn to pasture in the spring and fatten in the fall at from twelve to fifteen months of age?

Ans.: The first plan is better as in winter the hog is a consumer of expensive foods, and the amount it takes to get them through the winter would carry the spring pigs up to the fattening time. There is one advantage in fall pigs and that is that they may be fattened to turn off on the summer and early fall market which is usually higher than in the late fall and winter.

Time for Spring Litters.

When is a good time to have spring litters come?

Ans.: Some farmers do not want their sows to farrow until the pigs can get out on the round, while others prefer the last half of April. Those who intend to raise two litters arrange so as to have their sows farrow as early in March as possible so as to re-breed them the latter part of May.

Number of Pigs a Sow Should Have.

How many pigs should a sow have before she is butchered?

Ans.: That will depend on the sow. When a young sow has only four or five pigs, or shows herself to be a poor milker or a careless mother, the sooner she is fattened the better; but if she does fairly well she should be given a second trial. The second litter is usually larger than the first. If she then proves a good mother and her pigs develop into good porkers, she should be kept as a breeder until she can be replaced by a more prolific and better animal.

Number of Pigs to the Litter.

I have two brood sows five and six years old respectively. One has never had more than four pigs at a time while the other has never had less then thirteen. What is generally considered the right number of pigs for sows to have on an average?

Ans.: Seven or eight pigs to the litter is the proper caper. If there are more it seems to be at the expense of quality, and if there are less it is at the expense of profit.

Large Litters.

Which has the most to do with large litters of pigs, the sire or dam? Does it depend on the condition they are in?

Ans.: No one can expect uniformly good results from either sows or boars unless they enjoy their full vigor. If litters are uniformly small throughout the herd, especially if sows are of different strains, the sire would be at fault, but if only certain sows farrow small litters, the fault must be with them and they should be sent to the block and sows from large litters substituted in their places.

Number of Pigs Dropped.

Is there any plan to have sows drop more than five pigs?

Ans.: Yes, it is possible to increase the fecundity of sows by intelligent selection, and then it becomes the rule rather than the exception. Select sows from fertile mothers, and at the same time select sires out of prolific families, and do not allow immature breeding. This will invariably result in larger litters.

Artificial Abortion.

I have a registered sow that got to a scrub boar about two weeks ago, and if she is with pig I want to know if there isn't something I can give her to cause her to lose them soon. I want to breed her to my registered boar.

Ans.: The only alternative now for you is an operation by a competent veterinarian, and even that is rather dangerous. The medicines used to gain the results desired are not always successful and are generally very dangerous. Fluid extract of ergot is the drug used in such cases. Teaspoonful doses every three hours until it has the desired effect. The method can hardly be recommended.

Sow Overlying Her Young.

I have a very good sow, but the last time she farrowed she seemed to be quite excited and either trampled some of her pigs to death or else lay on them. Otherwise she is a very good sow and if I could prevent this trouble I would not think of killing her. Is there anything I can do?

Ans.: A careless mother will lose some pigs the best you can do. As farrowing time approaches be sure the sow is in a pen by herself with a good strong rail or plank around the sides, standing out some 8 or 10 inches and about 8 inches from the ground. This will prevent the sow from rolling or tramping on her pigs and while very simple, it often means the profit or loss of the litter.

Losing Pigs After Farrowing.

One of my sows farrowed during a very cold day. I thought she could take care of them so left her alone. How could I have saved the pigs?

Ans.: When it is very cold the pigs should be taken away as fast as they are born and put in a warm basket, but should be returned to the sow as soon as she is through. If pigs are worth breeding, they are worth caring for, and when the farrowing is properly looked after the losses will be very small.

Trouble in Farrowing.

What should be done when a sow cannot give birth to all her pigs and what is the cause of this condition? Two of my young sows were bred before I intended they should be, and during the month of January cold weather prevented them from receiving the proper amount of exercise. They farrowed about the middle of February and there are only four pigs left out of fourteen. Some were born dead, others died soon after birth and one of the sows could not give birth to all her pigs. The entire trouble I blame to lack of exercise during the latter part of the period of gestation. Is there an instrument that I could use in such cases?

Ans.: In mentioning the lack of exercise you have no doubt located at least one of the causes of the sows being unable to farrow properly and also the reason for weak or dead pigs. However, this is probably not the only cause. It is very evident that the sows were too young and of course their size at farrowing time might have something to do with their inability to deliver themselves of the entire litter. Another very important cause of the above mentioned trouble is too heavy feeding of grain while the sows were in pig and lack of laxative foods during the latter part of the period of gestation. Breeders make it a practice of using oats or barley as a very prominent part of the ration for brood sows and add oil meal or bran quite frequently. In a case such as above mentioned some farmers give a dose of linseed oil about four days before farrowing and find that it proves beneficial. However, this should not be administered previous to a week before farrowing time as it might cause abortion. Constipation is another cause of this trouble, especially among young sows and this can be avoided largely by the foregoing method. In sows that are small the trouble in farrowing generally comes after the pig has left the womb and reaches the pelvic arch. In such a case they can be located easily and there are various instruments used to extract them. A very plain method is to take a wire hook and insert this in the pig's mouth, having it catch on the lower jaw. However, this method is rather rough and likely to injure the young pig. A better instrument is a regular pig forceps which can be purchased in any hardware store at a cost of about $1.00. When attempting to remove the young pigs while they are still alive care should be taken not to injure the tongue in any way or the pig will be unable to suck and will soon die.

Loss of Pigs.

I had five sows to come in the first of

April and lost all the pigs. Most of them were born dead, and the few that were born alive died a few hours after birth. All were born without hair and varying in size. The time of mating until the farrowing varied from 112 to 118 days. The sows have been fed ground wheat screenings and corn-and-cob meal, all steamed, and fed warm three times a day with swill. They look in good order. They have been allowed to run around the yard and clean up droppings after cattle that were fed soft corn on stalk. They have had salt and ashes.

Ans.: The cause may be due to injury by the cattle which they were with, or due to something they have eaten which has caused a derangement of the nerve centers. The first cause is probably the one.

Pigs Die Soon After Birth.

Had two brood sows last winter; they wintered in good shape and looked fine until they farrowed; the litters got sick and died, as did also one of the sows. The other got stiff and gaunt and would eat only enough to keep her alive. She has continued so all summer though slightly improved now. What is the trouble, its cause and cure?

Ans.: Without knowing how the sows were fed and cared for it would be impossible to tell what was the trouble with the pigs. In all probability there was something not quite right about the food or feeding. But it would be useless to try and tell what the trouble may have been without more information.

Breeding With a View of Fattening.

Would it be advisable to breed sows after farrowing with a view to have them fatten more easily after the pigs are weaned?

Ans.: All things considered, it would be better not to breed the sow again after farrowing where they are intended to be fattened.

Early Maturity.

Is much importance attached to early maturity?

Ans.: Yes, a person should select a hog that is reasonably well matured, but not so early matured that they do not have size and constitution.

Raising Pure-Bred Animals.

I have some pretty good hogs although they are not pure-breds. Would there be money in raising this sort of stock to sell for breeding purposes?

Ans.: The man who is raising hogs to be sold as breeding animals can not be too careful to breed only pure-breds. If you were going into the pork business your idea would be a good one if you have good strong stock. You would certainly fall down should you attempt to raise anything but pure-breds to sell for breeders.

Breed vs. Feed.

My neighbor and I have gotten into a dispute as to which is of the greater importance in successful hog raising, breeding or feeding.

Ans.: Neither feed nor breed alone makes the good hog, but a judicious combination of the two.

Broken Down Pigs.

If pigs break down, is there any way of building them up again for breeders?

Ans.: The older they get the worse they get. Be careful never to use a pig of that kind for breeding purposes, for the reason that there is no defect that it will transmit as soon as this one. It doesn't matter how good the hog is otherwise if it has this defect don't breed from it.

Feeding.

Feeding Hogs.

Feeding the Boar.

How should a boar be fed so that he will do better service? I haven't enough sows for two boars but they seem to be almost too much for one.

Ans.: Keep him as quiet as possible, and his food should be such as will give him strength and vitality, but not too fattening. He will do better service when he has sufficient grazing to give him exercise and only sufficient grain food to keep him in good condition without becoming so fat as to be heavy and unwieldy.

Feeding Fattening Hogs.

Should fattening hogs be fed all they will eat?

Ans.: Do not feed them any more than they will eat up clean. More than this is only a waste and is apt to get them "off their feed."

Corn for Fattening Hogs.

I have a lot of hogs to fatten this fall and not very much corn to give them. Had I better sell off the entire bunch or try to get along with some other foods?

Ans.: There are still those who firmly believe that corn is the only hog food. While it is perhaps better than any other one food, yet it is not necessarily the only

food for hogs. In a series of experiments conducted by the Iowa Experiment Station they found: 1. That in the fattening of young hogs a ration containing more protein and ash than a corn ration gave better results than a ration of corn alone. 2. That a ration consisting of five parts of corn and one part of Swift's tankage yielded over thirty-four per cent greater net profits than a ration of corn alone. 3. That a ration consisting of five parts corn and one part Darling's beef meal yielded over twenty-two per cent greater net profits than a ration of corn alone. 4. That a ration of corn and standard food yielded over ten per cent greater net profits than a ration of corn alone. 5. That a ration consisting of five parts corn and one part Armour's tankage yielded over seven per cent greater net profits than a ration of corn alone. With these results from such a corn state as Iowa, Minnesota farmers should get down to business and put aside the exploded theory that corn is the only hog food and that there is no use trying to buck up against the corn belt states in the production of pork.

Profitable Way to Feed Corn.

What is the most profitable way to feed corn to fattening hogs?

Ans.: The most profitable way is to feed on a feed floor that is kept clean, and feed no more at any time than the fattening animals will eat up quickly and clean. If the corn is very dry and flinty, it will pay to shell and soak it, especially for young pigs. Even shelled corn should be scattered on a feed floor rather than fed in troughs, as the pigs will pick it up more slowly and masticate it more fully and will get needed exercise doing it.

Corn Fattened Hogs.

Is it economy to fatten hogs wholly on corn and water, or would it be better to give a portion of the feed ground and in slop? What slop should be fed, and what should it consist of in connection with corn?

Ans.: Mature hogs can be fattened on corn and water, but growing hogs should have some slop feed. They have muscle and bone to make as well as fat to put on and this requires a growing feed. Wheat middlings or wheat middlings and oil meal make the best slop. When barley is cheap one-third barley meal might be used.

Feeding Corn in the Corn Belt.

We have been feeding our hogs mostly corn the year through and we notice that they are susceptible to disease. Is there any way we can avoid this trouble?

Ans.: In the corn belt much better results could be obtained by feeding more succulent foods such as clover and peas in combination with the corn. This would also render the hogs less liable to disease. Corn alone is an unbalanced ration and is not good for the hogs when fed that way.

Balancing the Ration.

I had a lot of corn left over from last year. How will it do to feed it this summer to my hogs?

Ans.: Corn is too heating a food to be fed alone to hogs during the summer. Where it is given in large amounts green and succulent foods must be provided to balance the ration. There is nothing better than clover or field peas for hog pasture. Where the above foods are grown on the farm and fed in a combination with roots, good results always follow.

Amount of Corn Necessary to Feed a Hog.

If fed judiciously, how much corn will it take to fatten a hog, say to about 250 or 300 pounds?

Ans.: A well bred hog properly fed will convert one bushel of corn into 12 pounds of pork.

Corn for Hogs.

I have a few hundred bushels of corn. Would it pay to buy hogs and feed it to them this fall rather than to sell the corn for 35 or 40 cents a bushel?

Ans.: If you have got the right kind of hogs, that is, good feeders, and give them personal attention, it would be more profitable to feed your corn than to sell it at 35 or 40c a bushel.

The Value of Corn as a Food.

How much pork is one bushel of corn calculated to produce?

Ans.: One bushel of corn fed to good, thrifty hogs should produce from 10 to 12 pounds of meat.

Green Corn.

Will green corn cause hog cholera?

Ans.: Green corn in large quantities will disarrange a hog's stomach so that it is very apt to take hog cholera. Cholera is caused by a disease germ and the weaker animals, such as those fed too largely on a corn diet, are more apt to fall a prey to it than those fed a mixed ration and consequently are healthier.

Green Corn for Hogs.

I have a considerable amount of green corn that was planted too late for the ears to mature before frost. If I cut it and feed it green to my hogs can I feed them for market this way?

Ans.: Green corn, stalk and all, is a good starter for the hogs but it must not be their entire ration. Some dry feed such as old corn or barley with a little oil meal is indispensable in keeping up their strength and regulating their bowels.

Green Fodder for Hogs.

I have a lot of green fodder corn over and above what is necessary to fill my silo. I also have a lot of hogs and the pasture is running short. Would it pay to feed this fodder corn to my hogs and how much should I give them?

Ans.: Fodder corn makes an excellent hog food during the fall. If possible cut it for them every day, and give them all that they will eat up clean. While it is green the hogs will chew it all up, ear and stak, and there will not be the waste that would of course follow if the fodder were dried.

Feeding Screenings and Corn.

What would be the best way of feeding hogs wheat screenings, ground or whole? Corn, shelled or on the cob?

Ans.: Soak the screenings and if possible in cold weather strain and feed to stock in a thin condition. Feed the corn direct without any preparation unless it is very hard. In such a case it would be better to soak it.

Value of Wheat.

How much is wheat worth to feed, when hogs are worth $3.50 per hundredweight?

Ans.: The average feeder will not make more than 10 pounds of live weight from 60 pounds of wheat. Including the tolls and grinding, it would be worth 35c per bushel.

Wheat for Hogs.

Is dry, unground wheat good feed to fatten hogs, or would it be better to grind it?

Ans.: For hogs wheat will give better results if ground before feeding.

Winter Rye.

How does winter rye compare with corn for fattening purposes?

Ans.: Winter rye does not compare favorably with corn for fattening; as hogs would soon tire of an exclusive rye feed.

Speltz for Swine.

Will speltz furnish a good food for swine?

Ans.: While the hull is so coarse that in the unground form it would not make a first class hog food, when ground it is quite palatable. It could be used to advantage along with barley and oats. It is a food that will probably prove more valuable to farmers north rather than south of the latitude of St. Paul.

The Value of Speltz for Hogs.

How about the advisability of raising speltz for hogs. What is its value for feeding purposes compared with barley?

Ans.: Speltz, pound for pound, is not considered quite equal to barley for feeding purposes. It has a larger amount of pulp than barley, consequently it is not quite so perfect a food for hogs. Experiments at the South Dakota station tend to show that it is not quite so good as barley, although it is a very good food if fed in proper combinations. There are sections of the country where it will yield far more than barley, especially in places where hardy grain is required. For North and South Dakota, it would be safe to sow at least a limited area of it on trial with other crops.

Ground Speltz for Hogs.

Is ground speltz to be recommended as a grain ration for hogs?

Ans.: Speltz is said to make a very fair hog feed when ground and made into slop. Where corn and other grains can be raised successfully you should not bother with speltz, as it has too much hull to make it an ideal hog feed.

Millet Seed for Fattening Swine.

Is millet seed a good feed for fattening swine and would it pay to grow it for this purpose alone?

Ans.: The South Dakota Experiment Station made some extensive experiments in fattening swine on millet seed with the following results: 1. Millet seed can be grown profitably as a fattening ration for swine. 2. It doesn't furnish as good a ration as either barley or wheat for swine. 3. On account of being so well adapted to the conditions of that state and so palatable a feed, where you have a place in the rotation of crops for it, it should be grown on every stock farm. 4. It was not so profitable to feed for a period of 84 days as it was for 56 days as the rate of gain decreased. 5. The carcasses of the lot fed on millet were clothed with pure fat of superior quality as compared with the fat of those fattened on barley and wheat. 6. It required 1-5 more millet than it did barley meal and a trifle more barley meal than it did wheat to make a pound of gain. 7. A bushel of 56 pounds of millet is equal to a bushel of 48 pounds of barley for hog feed. 8. Millet meal was found not to be so good for a fattening ration as barley meal or wheat meal during extremely cold weather.

Millet for Hogs.

Is millet good feed for pigs?

Ans.: Those who have fed millet seed to pigs claim very good results from using it. However, it would be well to use caution until the right amount to feed can be determined.

Flax Seed for Hogs.

Would it be well to give hogs of about 150 pounds some flax seed once in a while to tone them up? If so, how often and how much?

Ans.: It would be much better to feed

ground oil cake than flax seed for this purpose. Not more than ¼ of a pound should be fed per animal per day, and sometimes every other day would be often enough to feed that quantity. To feed much flax would likely impair the appetite of the pigs.

Linseed Meal.

Is linseed meal good for hogs and pigs?

Ans.: If linseed meal can be obtained at reasonable prices, compared with other grains, all right. It constitutes, as a small part of the ration, the essential elements of bone-and muscle-forming food, being of a highly nitrogenous nature; besides this, it prevents constipation and thus promotes health.

Oil Cake for Fattening.

Is it wise to feed oil cake to fattening hogs?

Ans.: Feeding ground oil cake is good under all and every condition. There is nothing that gives so much satisfaction as a ration that contains oil cake. Be careful not to feed it too liberally at first. They need only enough to keep the bowels in good order.

Oil Meal.

Is oil meal a good feed for hogs?

Ans.: It is. Begin on a very small ration, however. It should be mixed with other feed and give only enough to keep the bowels free.

Barley Meal.

Is barley meal good for hog feed?

Ans.: Barley meal is good food for hogs, providing there is some shorts mixed with it, as hogs will tire of clear barley meal. It is well to mix it with boiled potatoes.

Corn-and-Cob Meal.

Is it better to feed corn ground with the cobs, and to what animals may it be fed to advantage?

Ans.: It may be fed to fattening steers, cows and fattening hogs. It has been found that hogs will make the same live gain with 100 pounds corn-and-cob meal as with 100 pounds of clear meal, but it should be ground fine for hogs.

Spoiled Beans for Hogs.

I have several bushels of beans which spoiled during heavy rains last fall. Some have sprouted and others turned yellow. Will they make good hog feed if I get them ground?

Ans.: Provided these beans are not rotted there is no reason why they should not furnish an excellent food for hogs. You might grind the beans and feed them mixed with middlings in the form of a slop. This should make an excellent ration for young pigs and there is no reason why it should injure the flesh.

Creamery Milk for Hogs.

Is there any danger in feeding creamery milk to hogs?

Ans.: There is no danger in feeding creamery milk to pigs, but there is danger and loss in feeding it to excess. In order to get the full value of skim milk with little pigs just weaned or being weaned, the milk should be at least eighty or ninety degrees F., and should be sweet.

Hogs Without Dairy.

Would it pay to raise hogs if I do not keep a dairy?

Ans.: If possible you should keep both a dairy and hogs. Hogs can be raised without milk, but better hogs and cheaper hogs can be raised with it.

Buttermilk for Hogs.

What is the value of buttermilk for hogs?

Ans.: It has about the same value as sweet skim milk. Its value will vary with the price of the grain being fed at the time.

Buttermilk or Skim Milk?

Which is the most profitable to feed hogs, buttermilk from the creamery or skim milk?

Ans.: Something depends on the age of the hogs and the condition of the milk. For brood sows nursing their young and for young pigs, good, sweet skim milk is better than buttermilk. For large hogs there is probably very little difference in the feeding value of the two as ordinarily obtained from the creamery.

Swill.

How many times a day should hogs be fed swill?

Ans.: Twice a day in the winter. A horse fed in the morning a full feed of oats, four or six quarts, and then filled up with water, will not get all the goodness of the oats. Practice that same idea with your hogs; if you always feed them the slop first and the dry feed afterwards, they will do better than to reverse it.

Swill While Fattening.

Should any swill be fed while fattening?

Ans.: Yes. Hogs that fatten easily are usually pigs that have grown well. To feed economically they must have a growing feed. There is nothing better than wheat middlings or shorts for this purpose, and when fed in connection with corn makes a very good fattening ration.

Sulphur or Copperas in Slop.

Would it be wise to put sulphur, copperas, salt or baking soda in hogs' slop?

Ans.: No. If you want to feed any or all of the above mix it with wood ashes and then they would not be compelled to eat more than they wanted, as they would in case you fed with slop. A considerable quantity of salt mixed with swill becomes poison to hogs.

Squash Feeding.

How should squash be fed?

Ans.: Feed them both raw and steamed. The advantage the squash has over the pumpkin is that if the pumpkin freezes it is worthless; but it is not so with the squash. Three or four loads of squash can be put in a straw pile and used in December and January. In the winter time they can be steamed. Cut them up, put them in a barrel, and steam them thoroughly. Then mix the other food with them. Do not use the hard shell; use the larger yellow variety of squash. Remember when feeding the animals, especially if you have fed them on grain or corn, that their teeth have become sore, and it is better to cut the squash.

Pumpkins in Winter.

Should pumpkins be fed to hogs in winter?

Ans.: If they could be kept from freezing and rotting a few would be good for succulenee. However, they are no good if allowed to freeze.

When to Feed Pumpkins.

Should one begin to feed pumpkins when green or wait until they are ripe?

Ans.: Do not feed pumpkins until they are ripe. They are then more wholesome than when green and the feeder then has his pumpkin crop to fall back on after the pasture is short or entirely gone.

Roots.

Are roots good feed for hogs?

Ans.: Roots are considered among the best of feed but they must be fed very moderately, particularly to young stock.

Mangels for Hogs.

Are mangels good for hogs?

Ans.: They are. There are many instances where hogs are fed mangels with very little grain and grow very nicely on them.

Roots for Swine.

I have grown quite a root crop with the intention of feeding them to swine, but one of my neighbors tells me that they make a poor hog food. What shall I do with them?

Ans.: If you have a lot of roots, 600 pounds of them will save you about 100 pounds of grain in the feeding of swine. You had better not listen to the advice of your neighbor in this regard until he can back up his statements by actual experience.

Sugar Beets for Hogs.

Will sugar beets fatten hogs? What had I better raise for hogs? In this country roots do well.

Ans.: Sugar beets are an excellent food for fattening swine, but grain should be fed freely along with them. Brood sows will winter well on sugar beets. The cheapest roots to raise for swine are rutabagas or mangels. They require less labor than any other roots except turnips.

Small Potatoes for Swine.

I have just sorted over my potatoes and find that I have two or three hundred bushels of very small ones. How much would they be worth per bushel if fed to swine? Would they be improved by cooking, and about how many pounds should be fed daily to each good sized shoat?

Ans.: Numerous experiments in feeding small potatoes to swine indicate that at average hog prices they are worth about 10 cents per bushel for this purpose. They are certainly much improved by cooking, and a good sized shoat can make use of from ten to fifteen pounds per day.

Feeding Value of Potatoes.

What is the relative feeding value of potatoes compared with rutabagas or mangels, for hogs?

Ans.: Potatoes possess the highest feeding value of the three, but no one of these foods alone could be relied upon as a food for swine. It would depend largely upon the cost of production and feeding them in conjunction with grain. It takes 450 pounds of potatoes to equal 100 pounds of corn meal.

Potatoes for Hogs.

How are potatoes for hogs?

Ans.: They are very good in small quantities fed raw to breeding stock in winter, as they give succulence. They have to be cooked if they are to be fed at a profit in any considerable quantities. Do not feed potatoes to any great extent if they can be put on the market at anything like a fair price.

Silage for Hogs.

Is silage good feed for hogs?

Ans.: Ensilage is said to be very good feed for hogs when fed in small quantities along with some grain.

Pushing Hogs for Market.

I have a number of hogs that I am pushing for market as fast as possible. Can they stand exeessive crowding or is there anything I might do that might add to their general health?

Ans.: When hogs are under high pressure, like any other high pressure machine, they must have the most careful attention. While they are being pushed for

market, furnish water, salt, charcoal or crushed soft coal, and a comfortable bed. These are all very necessary to the good health of his hog-ship and the profit of the owner.

Mixed Food.

Which is the better food for hogs, wheat alone, or mixed with barley, both being ground fine?

Ans.: A mixed food will always give better results, but if using only one, when the hogs are growing, the wheat would give better results. When fattening, it would give satisfactory results.

One Food or a Variety?

Should I feed my hogs corn all the time? I have lots of it, or would it be better to feed a variety?

Ans.: It should be the object of every hog raiser to induce his animals to eat as much as possible, and the greater the variety in the diet the greater will be the amount of feed consumed. The cheapest hog food is a crop that they can harvest themselves, supplemented with grain and other foods suited to the age and condition of the animals.

Number of Meals a Day.

How many times should hogs be fed a day?

Ans.: Hogs should be fed three times a day, at regular feeding hours, and twice a day when on pasture; but should always have access to pure water.

Feeding Brood Sows.

Feeding Brood Sows.

How should brood sows be fed?

Ans.: Feed them whole oats scattered thinly over a feed floor, wheat bran, and a little corn in cold weather to keep up the animal heat. Give them all the clover hay they will eat. Remember they must have plenty of exercise and sunshine with good wholesome food, if strong healthy litters are to be expected.

Increasing the Size of Litters.

I have a number of sows. Is there anything that I can feed them that will tend to increase the size of their litters? I have had very poor results in this regard of late.

Ans.: If you wish a large number of healthy pigs next spring, don't feed the brood sows with the fattening hogs. The bone and muscle feed that is commonly given to cows would better suit their needs.

Feed for Brood Sow in Summer.

What is the best feed for a brood sow in summer?

Ans.: A run on pasture that has a good mixture of clover, mill feed made into slop, and a little corn to keep up the condition of the sow after the pigs are four weeks old.

Feeding the Brood Sow.

Should a sow be kept fat or thin or just in fair condition? I have one that is getting rather fat, I think, but she is healthy. Will her being fat make any difference in the size of her litter?

Ans.: So long as she continues in good health and is making a fair growth the fatness will not make her less prolific, and she will usually produce larger litters and stronger pigs than if thin. This is especially true of young sows.

Grain for Brood Sow.

How much grain does a brood sow of two hundred or two hundred and fifty pounds need per day?

Ans.: It depends on the kind of grain. Her ration should not be wholly of corn. If a mixed ration, seven pounds per day would keep up a pregnant sow of two hundred and fifty pounds weight in growing condition.

Feed for Brood Sow.

Will a feed of corn, ground oats and barley be good for the brood sow?

Ans.: Yes, ground oats and barley made into a thick slop, with a little corn, would make very good feed for a brood sow. The ration could be improved, when the sows were not running on pasture, by adding a little bright clover hay.

Changing from Corn to Oats.

Will it be good to change from corn to oats in feeding brood sows? I have fed corn about eighty days since I bred them.

Ans.: The change proposed is a good one. A pregnant sow should have only a moderate allowance of corn.

Ground Oats for Brood Sows.

Is it advisable to feed ground oats to brood sows?

Ans.: Yes, ground oats is good feed. It may be fed either as a mash or thin slop along with pasture and a very little corn.

Oats for Sows.

Would it be as well to feed whole oats to brood sows as ground oats?

Ans.: Yes, whole oats gives just as good results and saves the labor and expense of grinding.

Oats and Peas for Sows.

What is the matter with oats and peas as a ration after farrowing?

Ans.: Oats and peas are all right in localities where peas can be grown. Peas generally grow best after timothy.

Flax Seed Meal for Brood Sow.

Would flax seed meal be good feed for the brood sow?

Ans.: In small quantities with other feed it is very good as it tends to tone up the system and keep the bowels open.

Feeding Flax to Sows.

I have some flax that is not worth threshing. Will it do to let breeding sows eat it before or after being bred?

Ans.: Much will depend on the amount of flax seed in the straw as to how freely sows may be allowed to eat it. In any event, it is a question whether they should be allowed to eat all that they will take. It would likely seriously affect their appetites for taking other food. A limited amount will be all right.

Feeding Horse Flesh.

Is it well to feed dead horse carcasses to breeding sows? I had two horses die a week ago and I am feeding them to my hogs. They seem to be all right now.

Ans.: There can be no reason why horse flesh should hurt your sows if fed in moderation. It would be wise, however, to discontinue the meat just before and after farrowing, as the meat, in the opinion of a great many, has a tendency to make sows eat their little ones. Better be on the safe side and not feed the meat at that time.

Skim Milk for Brood Sow.

Can you overfeed a brood sow with skim milk?

Ans.: You can overfeed a brood sow on most anything but pasture. When fed in moderate quantities, sweet skim milk is an ideal feed for any hog or pig at any age.

Skim Milk and Middlings for Nursing Sows.

Can just as good results be gotten from feeding brood sows skim milk and middlings without corn?

Ans.: No, not when they are on pasture. A little corn is necessary to tone up the system but be careful not to feed too much or it will upset the milk supply and render the pigs subject to thumps.

Sows Refuse to Eat Middlings.

I have two sows that farrowed in the middle of January. I am feeding them a little corn and swill made up of house slops, water, some bran and shorts. They eat the corn and drink the slop, but do not clean up the bran and shorts. There are 19 pigs with these two sows, all of which are doing well. Should I make any change in the treatment that I am giving them?

Ans.: This is a common difficulty with feeding shorts and bran in the winter time, especially if the slop is made with cold water and fed immediately. Cold water does not seem to penetrate or soak in winter as it does in summer. This difficulty can be overcome in a measure by using hot water and leaving it to soak for a time. Would recommend no change in the treatment you are now giving as long as they do well and remain thrifty. Give them an opportunity to get outdoors where they can take considerable exercise, as one of the most common difficulties experienced in raising winter pigs is that they are frequently kept confined in close quarters. This, with liberal feeding, often brings on thumps.

Sugar Beet Pulp.

Can sugar beet pulp be fed to old hogs and brood sows? If so, in what shape is it fed? Is it better to mix it with shorts and give it to them in the swill or feed it just alone?

Ans.: It is all right to feed the pulp alone. Sugar beets when fed directly to swine are fed this way, and there seems no reason why it would be necessary to mix the pulp with any other kind of food.

Roots.

A great deal is said about feeding roots before farrowing. Is there any objection to feeding them all winter?

Ans.: No, not if you have plenty of roots.

Feed before Farrowing.

What is good to feed before farrowing?

Ans.: Oats, corn, middlings, oil meal, a little bran, and just before farrowing, about a week, cut all the corn out, which would consist of about one-third of the ration. This is done to get the animal's system cooled out nicely. Feed some laxative food, a little oil meal or roots for about a week.

What Feed Before Farrowing?

How should a sow be fed just before she farrows?

Ans.: During the first two months no change need be made in her usual food. As her time of farrowing approaches, she must be kept separate from the fattening hogs and her food should be such as will produce bone and muscle rather than fat. Bran, shorts, shipstuff, ground oats, and peas, with but little corn, should be used. Fresh green pasture is good if it is to be had.

Feeding Brood Sows.

I have a number of registered Poland-China sows due to farrow soon. They have been fed chiefly soft corn during the winter and have had plenty of chance to exercise. I am now feeding soft corn in the morning, and carrots, potatoes and corn silage for the other feeds at noon and night. They also have salt and ashes. Is this food as good for them as middlings, ground oats and bran?

Ans.: Whether mill food should be added to the diet now given will depend largely on the proportions of mangels or

roots, other than potatoes, that are being fed. If the supply of carrots, mangels or turnips is large, then with some soft corn and potatoes you would have a very good ration. If the supply of roots is limited, then it would be a safe investment to buy middlings, even at $14.00 a ton. Potatoes are excellent food for swine that are being fattened, but for brood sows they do not make a good diet when fed in large quantities along with corn. They may be fed in considerable quantities along with shorts.

Feeding Brood Sows.

I feed some brood sows entirely on roots and a little chopped barley once a day. They keep almost too fat. Will that kind of feed do after they have farrowed? I feed the roots raw; should they be cooked?

Ans.: The feed you are giving the brood sows is most excellent before they farrow. They are not likely to get too fat on such a food. After farrowing the proportion of the grain ought to be increased and if some corn can be fed all the better, as there is danger of the sows getting too thin when suckling their pigs. The roots fed raw will answer very well.

Feed before Farrowing.

What is the best food to give young sows a week or two before farrowing? I have been feeding slops of ground oats and shorts and they seem in good condition. What kind of shelter is needed for sows and pigs in summer?

Ans.: The food you are feeding your sows is good and may be continued, but feed a variety if possible. Give them foods that will not produce too much heat, such as corn or rye. In summer the shade of a grove or of sheds is a great protection for swine.

Oil Meal for Sows.

Is there any danger in feeding oil meal to sows that are bred?

Ans.: Oil meal is very good for pregnant sows. One pound to six sows per day will be a sufficient quantity to give them. Mix it in middlings and feed in the form of a slop. Oil meal is especially good for breeding sows as it tends to keep the bowels open and prevents constipation, which is one of the worst troubles that hog men have to contend with. Sows that are constipated, especially young sows, are nervous and irritable during the time of farrowing and become so cross that they often turn on their young and destroy them as fast as they are born. For this reason it would be well to feed a little oil meal in the quantity above stated, especially during the last month before farrowing.

Linseed Meal for Sows.

My sows have nearly always been troubled with constipation just before farrowing, which I think is partially responsible for their sometimes eating some of their young. Would linseed meal be good to feed them for this purpose?

Ans.: Yes, linseed meal serves the double purpose of supplying protein and keeping the bowels open. It would be well to have a little on hand and begin feeding it in small quantities about a month before farrowing time.

Too Much Milk.

Just before farrowing I noticed that some of my sows were dropping milk from their teats. What is the cause of this?

Ans.: One often notices milk dropping from the teats a few hours before farrowing. This is a sign that internal nourishment has been completed and that nature is making ready for the new order of things. Overfeeding or the feeding of constipating or heating food at this time is likely to cause trouble to both the sow and her young. Feed lightly and remember that sow's milk is much richer than cow's milk.

Best Ration for Sow.

What is a good ration to feed the sow after farrowing when she should be on full feed, up to the time of weaning the pigs?

Ans.: Middlings and succotash. Middlings is the main part of the slop and of course a little corn, and the more skim milk the better.

Treatment of Sow Just After Farrowing.

How should a sow be fed just after farrowing?

Ans: The feed at this time should be strengthening, but not heating, and if any indications of costiveness appear she should have a good feed of wheat bran. A constant supply of salt and ashes or charcoal is especially needed at this time. Keep her quiet and do not disturb her unless absolutely necessary. Feed thin slop for 24 hours and give her a constant supply of fresh water.

Maintaining a Milk Supply.

I have a sow which farrowed about 10 days ago. I have been feeding her on corn and water with milk every other day. I notice that her milk seems to be drying up and the pigs are generally a pretty mean lot. What can I give the sow to make her produce more milk?

Ans.: While suckling pigs, the brood sow should be well fed in order to maintain a liberal flow of milk. No litters can thrive when their mothers are half starved. Take the corn away from her altogether and feed her liberally on crushed oats, middlings, or wheat bran and

milk. If you have any roots on hand cut some of these up for her every day. Increase the amount of food gradually until you give her all she will eat up clean. You have been starving your sow so far as milk production is concerned. If you have a good field of clover, fence off a little section for her and turn her into it along with her pigs.

Corn and Cob Ration.

I wish to know if a ration of ground corn-and-cob meal is good for a sow suckling pigs. One of my neighbors was feeding it and his little pigs began to get thin and die.

Ans.: If corn-and-cob meal was made the only food, the pigs would probably not get enough milk, as such food is not very good for producing milk. When this food is given to pigs, it ought to be very finely ground, but shorts, ground oats or bran should be fed along with the corn-and-cob meal when milk is wanted.

Brood Sows with Cattle.

Will brood sows get too much corn following cattle?

Ans.: They will if there are only a few sows and a good many cattle where much corn is being fed. Many successful stockmen raise their hogs this way and are perfectly satisfied with the results.

Hogs Run with Other Stock.

Can hogs run successfully with other stock?

Ans.: They can. Some feeders allow the brood sows to run with the cattle in the winter, while others prefer to run shoats with the fattening steers for fear the sows will get too much corn.

Corn Fodder.

Will cows eat corn fodder after pigs have picked the ears out?

Ans.: They will not. The pigs so soil the fodder that the cattle seem to dislike it and will go hungry a long time before they will touch it.

Brood Sows and Fattening Hogs.

Is it best to run brood sows and fattening hogs together?

Ans.: No. Brood sows should be fed to make animal growth and fattening hogs given a ration to fatten them. This requires two distinct methods of feeding.

Breeding Sows on Shares.

I am offered two thoroughbred brood sows on shares. What percentage of the increase should I give, the farmer getting the sows back? What share at six weeks old and what share when the pigs weigh 150 pounds?

Ans.: Much depends upon the quality of the pigs. It would be easier to answer if the pigs were grades, for then one would only have meat prices to use as a basis of judgment. Some pure-breds are of less value than grades. On the assumption that the sows are first-class for the breed, at six weeks old the one who feeds the sow should be well paid by getting one pair from each litter; at 150 pounds, by getting three of the litter. If the pigs were grades he should get a larger percentage.

Feeding Pigs.

A Question of Profit.

I have a few hundred bushels of corn. Would it pay to buy pigs and feed it to them this fall rather than to sell the corn at 35 or 40 cents a bushel?

Ans.: If you are able to buy good strong healthy pigs at reasonable rates and have a warm place to keep them and give them your personal attention it will pay you well, as one bushel of corn is calculated to produce from 10 to 12 pounds of pork.

Winter or Summer Feeding.

Would it be advisable to hold corn until next spring and then buy pigs at $4.00 or $5.00 a pair to be fed for the fall market or would it be more profitable to feed them during the winter with the idea of fattening them off in the spring?

Ans.: With a good warm sheltered place for your hogs where you can keep them warm and dry and comfortable during the winter weather, where you can give them your personal attention, it will probably pay to feed hogs in the winter. But if your conditions are such that your hogs would be subjected to all kinds of stormy and cold weather you would probably be the loser. It is generally conceded, however, that summer feeding is more profitable than winter feeding, as most of the growth can be made very cheaply on pasture, keeping the corn for finishing in the fall.

Pig Feeding Questions.

If I can buy pigs weighing 100 pounds each at $3.50 per hundred would there be any profit in buying feed for them if I could buy corn for 40 cents per bushel, barley for 35 cents and shorts for $14.00 per ton, and then sell them for $4.50 per cwt., when they weigh 200 pounds? How would I feed these three feeds so as to balance the ration?

Ans.: Leaving out of consideration the element of chance that would be taken of getting hog cholera by buying pigs, a good profit might be made, providing good, thrifty pigs were purchased at $3.50 per cwt., and that they are properly fed. Make corn the principal part of the ration. Pigs that weigh 100 pounds will perhaps have the necesary frame for taking on another hundred pounds of pork without the help of much nitrogenous

food. With barley at 35 cents and corn at 40 cents a bushel you could afford to cut out the barley entirely, in finishing. If the shorts are of good quality, make them a part of the ration, and give both corn and shorts in such quantities as they will eat up clean. They should be provided with comfortable quarters and frequent change of bedding and should be given access to salt and charcoal or pulverized soft coal. With good feed thrifty pigs should put on about 50 cents worth of pork for every 40 cents worth of food eaten, and this profit with the advance in price will make good compensation for labor and investment of capital.

Rations for Pigs.

What is considered a good ration for growing pigs, say two months old? Pigs now have rye pasture; will soon have rape. Price of feed as follows: Corn 40 cents per bushel; wheat 35 cents per bushel; rye 30 cents per bushel; wheat shorts $13 00 per ton. Which is the cheapest food?

Ans.: Of the foods named shorts is the cheapest when relative cost and suitability are taken together. If pigs of the age named can be fed two-thirds shorts and one-third ground wheat and rye, they ought to grow well. Of the foods named, corn is the dearest at the price given, but it is a puzzle to know where wheat can be obtained for 35 cents per bushel. It may be that it is somewhat damaged. As the pigs grow older the shorts may be lessened if there would be any necessity for doing this, and the other food increased. Rye, of course, may be used instead of wheat, but is not quite so good.

Will it Pay to Sell or Feed?

With corn selling at from 25 to 40 cents a bushel, would it be advisable to hold the corn until next spring and buy pigs at $4 or $5 a pair to be fed for the fall market?

Ans.: If you have warm sheds for feeding where the pigs will be protected from cold and if you can get good healthy pigs at this time it may pay you to commence feeding now for next spring's market, but if you are so situated that your pigs would be subjected to cold from lack of proper shelter, they will make such small gains as to make their profit a question. You will have to decide this question according to your environment.

Small Pigs in Spring.

If pigs are eight months old in the spring of the year and weigh only 100 lbs., would it pay to buy corn and fatten them or would it be better to let them run over summer?

Ans.: If pigs weigh only 100 lbs., at eight months of age they should have a run on clover pasture with a little grain feed made into slop to put them in good form. By running them on pasture during the summer they would be in good shape to fatten in the fall and you would in all probability have the corn without buying it to feed them.

Food for Pigs.

What is a good food for small pigs after weaning?

Ans.: A large portion of the ration should be milk, with shorts and corn meal, one-half by weight; or a slop made of shorts, with an addition of oil meal, and the corn shelled and soaked, with clover pasture will do very well.

Difference in Feeding.

Should the pig have the same kind of food while growing, as while preparing him for market?

Ans.: No. A pig should have a food that will stimulate growth; milk, shorts, oats, peas, clover, with an allowance of corn, would constitute a growing food.

Creamery Milk.

Is creamery milk fit for pigs?

Ans.: Creamery milk is good pig feed if it has been pasteurized at the creamery so it would not sour. Many farmers prefer, however, to separate it at home and feed the milk direct to the pigs. The sooner milk can be fed after it is drawn from the cow the better.

Value of Milk for Pigs.

How many pounds of growth should one get from one-hundred pounds of milk?

Ans.: If fed in connection with grain, five pounds. Or, 560 pounds of milk have been found equivalent to 93 pounds of a mixed grain ration.

Soured Milk.

Should skim milk be fed sweet or sour?

Ans.: See that it is not too sour. The first stage of sourness is not injurious.

Sour Milk.

Does milk lose its feeding value by souring?

Ans.: It surely does, up to a certain point, and the question is important when and how, and to what age of animal we are feeding it. Young pigs will always do better up to twelve weeks of age, on sweet milk, if mixed with grain in the proportion of 30 pounds of grain to 100 pounds of milk. Older hogs, in the finishing process, may be benefited by having the milk clabbered or slightly sour, but milk that has been turned to an acid has lost its feeding value and becomes injurious if fed in large quantities.

Whey for Pigs.

I have been trying to fatten my pigs on whey, thinking it was just as nourishing as skimmed milk, but they do not seem to thrive. What is the trouble?

Ans.: Pigs will not fatten on whey. Mix in a little middlings or ground oats and a little corn meal, and then you will see them jump.

Whey for Pigs.

Is whey a fattening food for young pigs?

Ans.: To make pigs grow rapidly, mix a little shorts in the whey. Be careful not to feed too much or they will scour. Warm separated milk is better than whey.

Barley for Pigs.

Which is the proper way to grind barley for pigs, fine or coarse? 2. Should barley be fed to pigs dry or wet?

Ans.: Barley is better ground fine than coarse when fed to swine. 2. It is better soaked than when fed dry, and in winter it is a still further improvement to steam it and feed it warm.

Whole Barley for Pigs.

Should barley be fed whole to pigs?

Ans.: No. Have it ground and mix it with shorts if you are going to feed it. Pigs soon tire of barley when fed on it alone.

Ground Barley and Oats for Pigs.

Is ground barley and oats as good as shorts for pigs?

Ans.: Always feed and make use of what you raise and produce; but barley and oats, while good for the sow, are not so good for the pigs as barley and shorts mixed, since there is too great a proportion of hulls, and if the oats can be exchanged for shorts at the same price, the shorts and barley will give better results.

Bone Meal.

Is bone meal good for growing pigs?

Ans.: A pinch of bone meal for a pig, each meal, is excellent.

Substitute for Milk.

What is the best food for young pigs when there is no milk to give them?

Ans.: Shorts or middlings, with one-third of corn meal and a little oil meal. Feed as thick slop.

Soaked Shorts for Pigs.

How long should shorts be soaked for pigs before feeding it?

Ans.: Soak the shorts only from one feed to the next. Never alow it to stand in a barrel as it will ferment.

Shorts Soaked in Milk.

Would it be best to soak shorts in milk or water?

Ans.: Soak them in water as the milk would sour. Never feed sour feed to pigs. Always add the milk as you feed; never let it stand in a barrel long enough to sour.

Feeding Corn.

How is the best way to start little pigs on corn?

Ans.: Shell and soak the corn for little pigs. After you begin to feed new corn feed it on the ear. In feeding shelled corn, scatter it about the floor or feed yard in some straw so they will have to hunt for the grains. This will give them exercise which is necessary if the best results are to be expected.

Feeding Corn Alone.

Why do my pigs stop growing when about five months old? They get all the corn they can eat and have all along.

Ans.: They stop growing because corn does not supply growing materials in sufficient quantities. Where pigs are fed on corn alone they are apt to get overfat while young. They should have a part ration of mill feed made into slop and a run of a good pasture, if large, strong frames are desired.

Feeding Sow with Pigs.

How much should I feed my sows when their pigs are about two weeks old? I don't want to make the pigs scour. Have had some trouble like this before and want to guard against it.

Ans.: After the first week there is less danger that the sows will be overfed than that they will not be fed enough. If they are overfed and the pigs show indications of scouring, they should have less feed and be given lime water to drink. If the pigs are old enough to drink they should have some scalded milk in which a little wheat flour has been mixed. If they are too young to drink, they should be given four or five drops of paregoric.

Starting Pigs after Weaning.

I have a lot of little pigs that I want to wean in about a week. What is the best food to give them at this time?

Ans.: Start the little fellows off on a thin slop of middlings and milk, but be careful not to give them enough to cause scours. It is always best to give them a little trough of their own while they are still nursing so that when they are weaned the shock will not be so great.

Starting Pigs.

How should pigs be started?

Ans.: Before the sow farrows, feed her so as to keep her in condition, so there is no danger of fever. Never start to feed young pigs until they commence to come around the trough where you feed the old sow. A few years ago it was considered best to try to encourage them to eat and get them started as soon as possible, but

it is best to leave it with the pigs. They will be strong and vigorous and they will get to eating too young and eat too much, and they will have trouble with scouring if you get in a hurry. Do not try to encourage them to eat too young, but feed the breeding sow heavily with the corn left out or nearly so.

Feeding Pigs before Weaning.

I have two sows that farrowed about four weeks ago. The pigs are getting along very well but I want to wean them as soon as possible so as to have the sows come in with a second litter in the fall. How could I best go about weaning them a little earlier than is customary?

Ans.: Young pigs can be taught to eat before they are weaned by having a small opening into an annex next to the main pen. Place a shallow trough in there, in which is poured a thin slop of milk and middlings or milk and ground oats. As soon as they take to this readily a little corn meal could be added to either of these mixtures. In this way the pigs are weaned gradually and safely and much earlier than they would otherwise have been.

Best Food for Pigs.

What is the best food to give little pigs in order to make them give the best results?

Ans.: To make young pigs grow thrifty, strong, and healthy there is nothing like milk, mill feed, and pasture, with a very little corn added.

Corn Meal for Young Pigs.

Is corn meal a good food for young pigs?

Ans.: No. Corn meal is too fattening and is a poor feed for them. Middlings and milk or ground oats and milk is the best food for young pigs. Get them on clover pasture as soon as possible.

Bran, Corn and Oats for Pigs.

Is bran, corn, and oats a good ration?

Ans: That makes a very good ration nearly balanced, the corn and oats should be ground and mixed with the bran.

Bran for Pigs.

Is bran good pig food?

Ans.: No. Bran is liable to give little pigs the scours. It is too coarse and irritates their bowels.

Bran for Young Pigs.

Is bran a good food for pigs just after they are weaned—say at the age of five or six weeks?

Ans.: No. Bran is so harsh that it is apt to cause irritation of the bowels. It is not a safe food for pigs under three months old. Give them some ground oats and milk or middlings and milk with plenty of rich pasture if available.

Pushing the Pigs.

How can I make the most satisfactory gains with young pigs?

Ans.: Good pasture and good water are necessary for health and making satisfactory growth, but in addition to these the pigs should have a liberal supply of bone and muscle-making food. Shorts and milk make the food for growth, and an exclusive corn diet is the poorest. They will fatten on corn, but it will be at the expense of health and growth and may even cause apoplexy or thumps if fed too much before they are six months old.

Cotton Seed Meal for Pigs.

I have an opportunity to buy a car load of cotton seed meal. Would it have any value for pigs?

Ans.: The use of cotton seed meal for swine has been extensively experimented with in several of our stations with very unsatisfactory results. One peculiarity of the experiment is that the pigs showed no derangement until they had been fed cotton seed meal for about 30 days, when over 80% of them died. It may be stated in general terms that when cotton seed or any of its by-products are fed in reasonable quantities with proper complements of other foods, satisfactory results are secured with all farm animals except calves and swine.

Cotton Seed Meal for Swine.

What is the feeding value of cotton seed meal in comparison with oil meal or shorts for pigs?

Ans.: Do not feed cotton seed meal to swine. They will appear to do pretty well on it for a time, but later the digestion becomes deranged and unsatisfactory results generally follow. In experiments conducted to test its feeding value for swine, several animals have died when it was fed any length of time. With other foods it is possible to feed a very small amount, but owing to the danger from feeding it you had better use foods you are sure of.

Stock Food for Swine.

Is there any kind of stock food that could be recommended for pigs to make them grow or fatten more quickly?

Ans.: There are several stock foods on the market, which, if fed to swine for a limited time, will act as a tonic and will thereby enable them to make a more economical use of food. Much attention, however, should be paid to the cost and to the length of time which such foods are fed. When these foods are used, it should be usually for a short time only, using them in the same way as tonics are used in the human family.

Swine not Growing Well.

I have one lot of swine, all over eight

months, that weigh only from 25 to 100 pounds apiece. For the past two months I have fed them all the corn they will eat and also 25 pounds of stock food and other things that I thought would do them good. Can you give advice that will help me out?

Ans.: Without knowing more about the condition of the swine and the way in which they were fed when young, it will not be possible to tell the trouble. One of two things has probably happened: either the pigs had the wrong kind of feed when they were quite young, which brought them into a stunted condition, from which they have not recovered, or they may have been affected with some skin disease which has interfered with their growth. If good, liberal feeding of shorts, fed in the form of swill, and corn fed whole or ground, will not put them in good condition, the case is discouraging. A little oil meal added to the swill would likely prove a benefit.

Heavily Fed Pigs.

I have a young litter of pigs that is in a very thrifty condition. I fed corn, ground oats and bran. When some of the smaller ones rush up to the trough, they have queer attacks of cramps or fits. They will fall over without a sound and lie like dead. After a few minutes they will get up, stiff and shivering, but pretty soon will eat as if nothing had happened.

Ans.: Stop feeding corn, and to the ones which show the symptoms, you can give a tablespoonful of castor oil and feed very sparing for a few days. They are likely to die in one of the spells. Allow them a good roomy pen and plenty of sunshine, but at the same time keep them warm and dry.

Fattening Young Pigs.

In finishing fattening pigs five months old, should they be allowed to run in a large pasture, and if so, why?

Ans.: Never confine young hogs unless it be for a short time at the finishing period. Every young animal must have exercise to keep healthy and develop a perfect body.

Middlings for Small Pigs.

Is middlings good for the small pig?

Ans.: Middlings are not as good for the young pig just weaned as skim milk. They cannot digest the middlings as well until they are two or two and one-half months old, then the middlings should be added.

Feed for Pigs.

Which is preferable for pigs, cracked wheat, finely ground wheat or middlings?

Ans.: Finely ground wheat, mixed with some middlings, has given the best results for young pigs, but it should be soaked at least six hours and fed wet.

Grain Fed to Little Pigs.

When should one begin to feed grain to little pigs?

Ans.: Begin to feed them shelled soaked corn as soon as they will eat it, and also shorts mixed with milk. They are usually about four weeks old when they show a disposition to eat. Mix the slop up fresh for each meal. Don't allow it to stand over or it may ferment and injure the pigs.

Food for Young Pigs.

I have a lot of pigs that I am feeding shorts and bran. I have no milk for them at present. Is the feed all right, and is there anything I can mix with the food that will take the place of milk?

Ans.: This food is all right for the sows, but for pigs leave the bran out; it is too coarse for them. If the pigs are nursing they should be kept on the sow until they are at least ten weeks old. While they are still nursing give them some thin slop made of shorts and water. Ground oats with the hulls sifted out will be good to mix with the slop.

Feeding Pigs.

Five sows farrowed this month. Would like a few points about feeding both the sows and their pigs. We have plenty of feed but no pasture. Which is better: oats, wheat and corn ground together and mixed with sweet skim milk, or bran, shorts and skim milk?

Ans.: While the pigs are nursing, feed the sow oats, wheat and corn ground together in the proportion of oats two parts, wheat one part and corn one part. Results nearly as good will probably be had from feeding the sows shorts and bran in the proportions of two parts of shorts to one of bran, the skim milk being given in both cases. The former mixture has the advantage of improving the condition of the flesh. If it is evident that they are losing flesh the proportion of corn should be increased. The young pigs should get skim milk in a compartment by themselves just as soon as they will take it. Shorts should be added to the milk a little later. When eight weeks old they can be fed shorts and corn in the proportion of two to one parts respectively, the skim milk being added. The feed for both sow and pigs should be fed in the form of slop.

Feeding Pigs.

I want to push my pigs along as fast as possible and yet I am afraid to feed them too much for fear they will get the thumps. What shall I do about it?

Ans.: Let the little pigs eat all they want but be sure to allow them plenty of room for exercise. If they show an inclination to lie in their beds too much of the time, turn them out of the pen and fasten the door for awhile.

Keeping Pigs through Winter.

Does it pay to keep young pigs over the winter for another year's feeding?

Ans.: Very often not. But if you have them, keep them. The best money comes from spring litters.

Average Gain of Young Pig.

How many pounds a day should a pig eight months old gain while being fattened?

Ans.: If a pig gains one pound a day, from time of birth, he is making a paying gain, but this would require him to gain two pounds a day for the later period of his life.

Gain of Pigs per Day.

What should be the average gain of pigs per day from the date of birth to block?

Ans.: If pigs make one pound of growth per day, from date of farrow to block, they will always be profitable. This would require, for a part of the time, a higher gain than one pound per day, as during the first three months this would hardly be obtained.

Mangels for Swine.

Would boiled mangels make a suitable food for young pigs?

Ans.: Prof. Henry says:—"Because mangels stand well out of the ground, these roots are easily cultivated and harvested. When boiled and mixed with meal they are excellent for feeding swine and young stock."

Steaming Food for Swine.

Is it a good idea to steam food for hogs? Shall I get a small boiler for that purpose?

Ans.: In cold weather it is a good plan to steam the hog feed. The nature of the steamer or boiler should depend upon the size of the herd. In some instances a heater of considerable capacity would be best, in others a small boiler will answer the purpose. This is an important question in connection with the growing of swine and one that has a great deal both in favor and against it. Cooking is expensive unless one is doing a lot of feeding.

Feeding Rye or Barley.

In feeding rye or barley, wouldn't it be well to cook it?

Ans.: No. Grind the rye in all cases before feeding it to pigs and simply soak it. Some breeders prefer to feed it warm in the winter, but there is no advantage in cooking it, unless the pigs like it better that way. Sometimes in warming it, it gets up to the boiling point, and that practically cooks it.

Cooking Grain.

Does cooking the whole grain make it lose any of its feeding value?

Ans.: The presumption is that the protein part of the food partakes very much of the character of the boiled egg that is boiled excessively—it is not so digestible. Then, in cooking you dilute the food too much; there is too much water contained in it, in connection with the dry matter.

Cooking the Feed.

Is it advisable to cook food for swine?

Ans.: No, nothing but potatoes. If any one has a large quantity of potatoes in the fall and wants to feed them, they are rendered more palatable by cooking, but it would be scarcely practicable to cook all of their food except in cases where sows are sick just before or after farrowing.

Cooking and Grinding Hog Food.

As I am new to the hog business I would like to know something about cooking and grinding feed for hogs, that is, whether or not it would be profitable. Some of my neighbors hold that it is, while others claim that this work is unnecessary.

Ans.: The question of cooking and grinding hog food has many advocates on both sides, but from all the information that can be gathered from reliable sources the predominance of evidence is in favor of feeding grain whole and uncooked. There are times when cooking or grinding or both, will pay for the extra trouble. There are thousands of instances where hogs are given whole uncooked grain and are actually making better gains than others that are getting cooked grain, either ground or whole, so that it can hardly be considered wise to advocate either cooking or grinding except in cases of sickness or for sows just after farrowing.

Grinding Hog Food.

Will it pay to grind hog food?

Ans.: If corn is to be used it will not pay. Even old corn is better when soaked in water than when fed ground. Oats and barley, however, should be ground as fine as possible and it is preferable to feed them both in the form of a thick slop.

Ground Feed for Small Pigs.

For small pigs would it be advisable to feed ground feed raw or scalded?

Ans.: It makes no difference if it is soaked in the summer time. In winter some feeders use warm water for soaking and claim better results from doing so.

Grinding Corn for Hogs.

Will hogs do as well when the corn is ground as when it is fed whole?

Ans.: Under ordinary conditions let the hogs do the grinding. If the corn is hard it may be soaked for about twelve hours before it is fed.

Fresh Water.

Is it necessary to give hogs fresh water if they have plenty of slop?

Ans.: It is a common error with many that slop food will answer for both food and drink. An observant feeder will notice that when feeding slops, such as a swill barrel generally contains from a kitchen, mainly water and pieces of vegetables, that grain is added to this and the troughs are filled with the watery slush. He then observes that the pig or hog will dive for the solids, but in order to satisfy his want is obliged to swallow more of the liquid than needed, proving only a disturbing element to healthy digestion. But when slop is fed at the right consistency, as a pudding that will readily run out of a pail, and eaten clean, the hog will want water between meals, on pasture or in the pen.

Is Charcoal Good for Hogs?

My hogs seem to be troubled with a sour stomach and my neighbors have advised giving them charcoal. Will this do any good?

Ans.: It is generally accepted as true that there is not a great deal of difference between the stomach of a hog and that of a man. At any rate, charcoal is found to be useful in assisting the work of both.

Soaked Corn.

Have experiments in feeding soaked corn shown anything?

Ans: Experiments in Iowa and Kansas with soaked corn showed that the soaking was about equal to grinding and much cheaper.

Soaking Shelled Corn.

How long should one soak shelled corn in warm weather?

Ans.: Soak it until it is soft; twelve to twenty-four hours. Longer than that would start it to ferment and make it unfit for food.

Swill in the Winter.

How could swill be kept from freezing in the winter?

Ans.: Only mix it as you feed it and only feed what they will eat up clean. This is a good plan to follow both summer and winter.

Soapy Water for Pigs.

Is soapy dish water injurious to pigs?

Ans.: A large quantity of soapy dish water injures the glands of the bowels and sometimes causes death. You had better not risk using it. There is no food value in soap and the water is better to drink without it.

Pastures For Swine.

Hog Culture Without Pasture.

Could hog culture be made profitable without pasture?

Ans.: No, not on a large scale for a succession of years.

Alfalfa for Hogs.

Is alfalfa good pasture for hogs?

Ans.: It is the best pasture that hogs can have where it can be successfully grown.

Pastured Hogs Injure Alfalfa.

Does it injure alfalfa to pasture hogs on it?

Ans.: It injures it to pasture it too closely. The right way to pasture alfalfa is to have your pasture large and then run the mower over it occasionally to cut back those patches that the hogs do not feed off so they may come up green and tender.

Alfalfa Hog Pasture.

Is alfalfa as good for pasturing hogs as clover? Will it make a more permanent pasture than clover?

Ans.: Alfalfa will make as good pasture for swine as clover, and it will last a good deal longer in localities where it will grow well.

Artichokes for Swine.

What is there in favor of artichokes for swine?

Ans.: For fall and early spring there is no better crop than artichokes, which give a rich, fresh feed just at the time when grasses and clovers are at their poorest. The crop is easily grown and will make a volunteer growth from the scattering tubers in the ground. Of course, this crop cannot be cultivated, and will be more or less choaked by weeds or dwarfed by hard ground. It will pay well to plow and replant the crop each season, even though planted on the same ground.

Artichoke for Swine.

Is the artichoke a profitable root crop for hog pasture? 2. If so, what kind of soil would it require? 3. When is the best time to plant? 4. Where can seed be procured?

Ans.: The Artichoke makes excellent hog pasture for fall and spring in localities favorable to its growth. 2. Like the potato, it prefers a black loam vegetable

soil, but will grow in good shape on volcanic ash soils which characterize many of the mountain valleys in the west. 3. The tubers may be planted in the fall or spring, but preferably early in the spring. 4. Seed can be procured from any local seedman.

Soil for Artichokes.

What kind of soil is best suited for the growing of artichokes?

Ans.: The best soil for the crop is similar to that which is best for Irish potatoes. It should be rich, mellow and well drained. On dry, hard clay, the yield is always small.

Yield of Artichokes Per Acre.

I am thinking of planting artichokes for my hogs. How much could I expect them to yield per acre?

Ans.: The yield is variable from 400 to 800 bushels per acre. Its feeding value is equal in value to that of any other root crop.

The Best Pasture.

What is a good pasture for hogs?

Ans.: Where alfalfa does not grow there is perhaps nothing better than a clover pasture. June and Mammoth mixed are generally preferred and make a splendid pasture.

Clover Pasture.

I have a piece of land that I wish to get in clover for hog pasture. Clover does well here. The piece contains about five acres and is covered with brush with a few scattering trees. Wild peas grow where the soil is burned over in the spring. I intended to clear it off this fall cutting the stumps as low as possible and also the brush. I will burn it off in the spring. Can I get a good catch of clover by disking without plowing? I have another lot containing two acres which I intend to sow to peas and barley. Will it do to let the hogs run on the clover until July and then turn them on lot number two?

Ans.: A better stand of clover will be obtained by simply disking the land referred to than if it were plowed. If it could have been burned off in the fall the clover could have been sown earlier. Get it in as early as possible. There would be no harm in sowing a little barley or oats along with the clover. It would make swine pasture before the clover would be ready. The swine could be turned in to graze as soon as the oats or barley was high enough to furnish them with food. It would do very well to take them from this to the field sown to peas and barley.

Grain Feed for Pastured Hogs.

Does it pay to feed grain to hogs on pasture?

Ans.: Most decidedly. Hogs should have a little grain twice a day while on pasture no matter how rank it may be. Not much, but regularly.

Clover Fed Hogs.

Will hogs do well on clover alone, or should grain be added?

Ans.: It is an advantage to feed grain with clover daily at regular intervals, though in much smaller amounts than would be given if the hogs were confined in pens and small yards.

Clover and Corn for Pasture.

What time should I sow clover with corn when it is intended for a hog pasture?

Ans.: Not later than the 25th of June. Some weeds will come up in the corn but they will serve as a protection to the young clover plants during the winter. They will catch and retain the snow.

Hogs in Polk County, Minnesota.

Can hogs be successfully raised in Polk County, Minnesota?

Ans.: Hogs can be successfully raised in any part of Minnesota if they are supplied with an abundance of good rich pasture. It is yet an experiment as to whether alfalfa will grow in all sections of Polk County, although good results have been obtained by several who have tried it there. Clover generally makes a good growth in the northern part of the state and it should serve your purpose well even if you are unable to grow alfalfa.

White Clover for Pasture.

Will white clover make as good pasture for hogs as the red clover does?

Ans.: White clover is not as good as the medium red for hog pasture.

White Clover and Blue Grass for Pasture.

Will white clover and blue grass make a good pasture for hogs and how should I sow it?

Ans.: They make very fair pasture, but not as good as medium red clover. Sow with grain the same as other tame grasses if the ground is not so rich that the small grain will lodge and smother out the grass; if so, sow among the standing corn about June 15th, and cultivate once lightly to cover seed.

Substitute for Clover Pasture.

What is the best substitute for clover pasture for hogs?

Ans.: Austrian brome grass has been found, by many farmers of Southwestern Minnesota to be eaten with a relish and to be preferred to clover; but this should not deter anyone from giving clover a fair trial. It would be worth a trial to turn down a crop of the above grass and succeed it with the fall-sown rye, and seed this to clover upon the rye the spring following.

Grass for Swine.

Would Bromus Inermis succeed on scil that held surface water late in the spring, to be used as hog pasture? 2. Would Bromus Inermis or Timothy be liable to catch if sown with flax on a sod pasture that was broken up and sown in the spring; or would it be preferable to sow it the following year with other grain?

Ans.: Much would depend on the depth of the surface water. This grass has been known to be submerged in the spring for a couple of weeks at a time without any apparent harm. This was before the season of active growth commenced, but it is probable that deep water covering the grass for any considerable length of time would harm it. 2. If the season was moist, either Bromus or Timothy would be likely to make a stand with flax; if dry, both would be pretty certain to fail, for the reason, first, that flax is usually sown a little late, and second, such a preparation is not really a good one to secure a stand of grass. It would be more certain with both kinds of grasses to sow with the crop that followed the flax. It would also be well to take some other crop after the flax, to get the full benefit from the decaying sod.

The Permanent Hog Pasture.

I want to know something about permanent hog pasture and what kind of grass to sow?

Ans.: Sow blue grass, timothy, alsike and June clover. In the course of a few years it will run largely to blue grass, which is the best grass for a permanent pasture, as it is the first to start in the spring and holds out green the latest in the autumn.

Permanent Swine Pasture.

I have broken up a piece of land which is rather low. It was broken late last August. The soil is black and sandy but very fertile. I want it for hog pasture. We thought to sow alfalfa. Would that be right? How and when should it be sown? How shall we manage the ground before sowing? Should anything be sown on the sod this fall? If so, what? We want a permanent hog pasture. How shall we manage to obtain the best results?

Ans.: If the drainage of the land is enough to admit of the roots of alfalfa going down several feet before reaching the water table, then alfalfa would likely grow well on such soil. In the climate of Mt. Vernon, S. D., it would not likely stand the winter if sown in the fall. It is all right plowing the ground early. In the spring it should be well stirred and sown with alfalfa seed about the end of the wheat sowing season. Sow fifteen or twenty pounds of seed to the acre and cover with the harrow. It may be necessary to use the mower on the crop once or twice the same season to keep down weeds.

Permanent Pasture.

Can I keep a permanent pasture for my hogs without their rooting it up?

Ans.: Yes. Hogs that have a good range are not liable to root if they have the proper feed and plenty of wood ashes and salt.

Continuous Pasture.

I mean to divide a piece of ground into three or four parts for hog pasture. I have a piece of timothy for early pasture which I will call pasture No. 1. What shall I sow on plots Nos. 2, 3, and 4 for midsummer and fall pastures? Is rape a good hog pasture and will it grow with speltz and fodder corn? If so, how should I sow it?

Ans.: On plot No. 2 sow oats and barley as soon as the ground is ready. On plot No. 3 sow Dwarf Essex rape early; on plot No. 4 sow sorghum after the corn is planted, and on No. 2 sow rape after the oats and barley are eaten. This will make pasture through all the summer. The rape does best when sown by itself, but it may be sown with speltz and pastured where the speltz is harvested.

Early Hog Pasture.

Can a field, plowed last fall, be made for a hog pasture this spring or early summer?

Ans.: A portion of it may be seeded to winter rye early, and seeded with clover. The clover may be a success or failure and the seed may be lost. Another portion of the field should be seeded to barley and oats mixed, and another portion to Dwarf Essex rape, which will give satisfaction nearly through the season. If the clover should do well with the first two plots, it will make a good pasture the next season.

Time to Sow Rape.

When should I sow rape for hogs?

Ans.: Rape may be sown for hog pasture any time in the spring after the ground is dry enough to sow, but any time before July will do if the season isn't too dry. It should be fit to pasture seven weeks after sowing. If the plants are eaten off short while young they are apt to be injured, otherwise they will sprout up again vigorously.

Sowing Rape.

How early in the spring is it safe to sow Dwarf Essex Rape for hog pasture, and how much seed to the acre?

Ans.: As soon as the ground is nearly dry in the spring it is safe, but a hard frost will kill it when it is young. About the time spring wheat sowing is through in an ordinary year is a safe time to sow rape. Many farmers who sow rape in their grain, mix the seed and sow it along at the same time.

Rape for Swine.

When is the best time to sow rape for swine; how much to the acre should be sown and where can I get it?

Ans.: Rape seed can be sown for swine any time from the opening of spring until the middle of July. Sow about five pounds of seed to the acre. The seed can be procured from any good seedsman. The rape plant is one of the best for swine that can be grown in this Northwestern country. Sow only the Dwarf Essex variety.

Hogs on Rape.

Right after a rain, is there any danger from turning hogs on rape?

Ans.: There is no danger from bloat in hogs pasturing on rape, but it is said to cause sores behind the ears if the pigs are kept in rape that is wet most of the time.

Rape Pasture Growing too Fast.

My hogs are out on rape, but it is growing a great deal faster than they can eat it off. What can I do about it? I do not care to purchase any more hogs at this time.

Ans.: If the rape pasture gets the start of the hogs and they refuse to eat it, cut off the tops with the mowing machine and let it make a fresh, succulent growth.

Hogs Won't Eat Rape.

How can I get hogs to eat rape? I read so much about it being such good feed for them that I sowed a piece early in the spring. It came up nicely and had quite a start when a hard frost in May froze nearly all of it out. There was some left under the protection of trees and a little left in patches over the field. I turned the hogs into it after it had gotten fair size, but they paid no attention to it.

Ans.: Your hogs had never eaten rape before. Keep them on the rape and they will soon get extremely fond of it. Pigs will leave grain to eat nice crisp rape when they get used to it. Don't be discouraged about the rape freezing. That will probably not occur again in ten years.

Pasture for Pigs.

What makes the best hog pasture for use the first season?

Ans.: Barley and Dwarf Essex rape sowed at the rate of one bushel of barley with five pounds of rape seed to the acre.

Temporary Pasture.

I have a few hogs but have no pasture for them. What would give the best results?

Ans.: Sow rape seed for them at the rate of five pounds of seed per acre, and sow again every six weeks. You will then have a good pasture for your pigs all summer. Rape will furnish pasture in about 60 or 75 days after sowing.

Rape and Oats for Pasture.

Is rape sown in pasture with oats good for young pigs, also for old ones?

Ans.: Rape is excellent for swine of all ages. If it is cropped closely while young, however, the growth will not be as sturdy as if it were allowed to get larger before pasturing. For this reason a good many favor sowing the rape alone for hog pasture.

Oats and Rape.

I have a hog pasture of about two acres (sandy soil) which I wish to sow in rape this spring. How would it do to sow about one bushel of oats with the rape seed for the pigs to work on till the rape is large enough? 2nd. In case the rape was growing too fast for the pigs, would it do to feed it off with cattle?

Ans.: Rape should grow well on such a soil if it is rich, but the plan proposed would not work well, as to keep the oats down the crop would have to be pastured early. This would cause the rape to be cropped down when young. When this is cropped young, it does not grow up again with such power. A better plan would be to sow clover with the rape to provide pasture later. 2. It would answer all right to feed the rape down with cattle. It should be remembered that the highest pasture value from rape is obtained from it when it is pretty well grown.

Barley and Rape in Place of Clover.

What can be sown to take the place of clover that will make a pasture soon after sown?

Ans.: Barley and Dwarf Essex rape make very good pasture. Sow about a bushel of barley and five pounds of rape seed to the acre and turn on as soon as it is four or five inches high.

Hog Pasture.

What should I sow for early hog pasture on land broken late last fall? It was brush land with such trees as oak, willow, hazel and black-elder growing on it.

Ans.: Barley and oats will make good early swine pasture on this land. Dwarf Essex will also make good pasture, sown a little later. Canada field peas would furnish good pasture, but would not be ready before the middle of June or even later. If good red clover is sown along with the barley and oats, and sown pretty thickly, it will probably furnish pasture late in the season after the barley and oat pasture is gone.

Pasture of Barley and Oats.

When should hogs be turned on barley and oats for pasture?

Ans.: As soon as there is growth enough to cover the ground.

Quantity of Oats and Vetch for Pasture.

I want to sow oats and vetch for a hog

pasture. How much of each of these seeds should I sow to the acre?

Ans. One bushel of the oats and one peck of vetch seed is sufficient to seed an acre.

Vetch on Sandy Soil.

Will vetch make good hog pasture on very sandy soil?

Ans.: Vetch is not generally satisfactory on sandy ground unless the soil is first inoculated with suitable bacteria. A good, rich sandy loam is well suited to the growth of vetch. This crop usually grows very well after a crop of clover or peas.

Timothy Pasture.

How does an acre of timothy pasture compare in value with an acre of clover for hogs?

Ans.: It does not compare at all. Clover is generally considered the best crop to grow for hog pasture wherever it can be successfully raised, provided alfalfa will not grow there.

Pasture for Swine.

I have a small piece of ground to seed down to clover this spring for hog pasture, expecting to run a central fence to divide the ground in two. Would like to know what is best to sow with clover to furnish better food for this season that will not hurt the catch of clover or the growth of the same?

Ans.: Sow barley at the same time as the clover on half of the ground and Dwarf Essex rape on the other half. Do not sow less than two bushels of barley per acre, and begin pasturing as soon as food is plentiful. Sow five pounds of rape seed. By the time the barley is eaten down the rape will be ready.

Hog Pasture.

What mixture of seed will make good hog pasture?

Ans.: To make good hog pasture, you may sow (1) oats and barley; (2) rape; (3) peas; (4) sweet corn; (5) winter rye; the last being for late fall and early spring pasture. Sow the barley and oats at the rate of about two bushels of barley, and one bushel of oats per acre. The sweet corn may be planted as corn is usually planted for growing grain. The rye should be sown in August or September.

Hog Pasture.

I have five acres that I would like to put in pasture for hogs. What shall I sow and how much per acre? It is a clay soil with stones in it. How many hogs can I keep to the acre and can I put them on the pasture this summer?

Ans.: A mixture of about six quarts of red clover, five pounds of rape and about two bushels of oats to the acre will make excellent hog pasture. Divide the lot in two, alternating the pasturing of the same as you see it is necessary. Rape alone makes a very good pasture and if you use it, turn your hogs in when it is six inches high. Do not be surprised if at first they do not eat it. Starve them until they do, and when they become accustomed to eating it they will enjoy it and thrive satisfactorily. Ten or twelve hogs to the acre will be about as many as you can profitably afford if the pasture is in good condition. If you have only the breeding stock, one sow with her pigs will be enough to the acre.

Pig Pasture.

At what age should pigs be put into pasture? How long and what kind of pasture?

Ans.: You did not say to what extent you have pasture for your hogs, but there is no reason why your pigs should not enter upon pasture as soon as they are able to run with the sow. Let the pigs run upon a clover pasture. You will also find barley mixed with winter rye a satisfactory pasture. You will have healthier and better hogs if they pasture. Aim to let your hogs run in pasture in May when the clover has fair hold of the field, and when they are once upon the pasture feed twice a day.

Pasture for Swine.

I want a plan for five acres of hog pasture suitable for the country about Ross, N. D., remembering, first, that this is a new country; second, that we are subject to early frosts—as early as August 7th; third, the soil is black loam; fourth, we are inexperienced as to raising peas or rape and cannot yet raise clover.

Ans.: Under the conditions named it would be best to sow but two crops. The first would be barley and oats, the mixture consisting chiefly of barley, which should be sown as soon as it is safe, because of early frosts. Then about the same time, sow Dwarf Essex rape, at the rate of say five pounds of the seed per acre. Neither crop will furnish swine pasture earlier than June 1st. After a lapse of three or four weeks, sow another piece of rape. This food should carry the swine on until the end of September. The frost should not be severe enough to hurt the rape before that date even in your locality. To provide pasture for the next year, sow winter rye. This should be put in about the end of August. Then the following spring, sow barley and oats and rape, as described above.

Dividing Hog Pastures.

I have ten acres to sow for hog pasture. Shall I give them the run of the whole lot at once or divide it up into lots?

Ans.: Hogs are wasteful grazers when turned into rank pasture, and a great saving of feed can be secured by growing different grazing crops in long narrow

fields, which may be divided into sections by movable transverse fences to allow for frequent changes of pasture.

Pasture for Eight Hogs.

What would you advise me to sow for pasture to carry eight hogs through the summer?

Ans.: Sow barley and oats together to provide early pasture and peas separately for summer pasture. To carry eight hogs from June 1st to August 15th, plant ¾ acre of barley and oats and ¼ acre of the peas. Winter rye should be sown the previous autumn. For late pasture Dwarf Essex rape can be sown any time within 60 or 75 days of the time wanted.

Pasture for Ten Hogs.

How much pasture would I need for ten hogs?

Ans.: By making frequent changes, one acre will yield an abundant grazing for at least ten full grown hogs or for a correspondingly large number of younger animals. It is always well to grow a variety of grazing crops, planted so as to ripen in succession. The greater the variety the better will be the results.

Pasture for 100 Swine.

How many acres of pasture would 100 spring pigs need, some grain being fed?

Ans.: This question is difficult to answer, owing to the great difference of soil and soil capabilities. Ten acres, divided into say two or three lots, should carry 100 pigs from spring until early autumn. If all were in one lot it would take considerably more.

Pasture and Swine.

Is it necessary to have pasture in order to raise hogs successfully?

Ans.: A good pasture is as necessary for profitable hog raising as for the growing of beef. No one should attempt to grow pork for market without providing at least one field where the hogs can have abundant exercise, and can find enough roots and herbage to keep them in health.

Pasture Running Short.

I have quite a large number of hogs and find that my pasture is going to run short. It would not pay me to sell the hogs now. What shall I feed them? I have good fields of clover and alfalfa but want to save them if possible for feeding my stock in the winter.

Ans.: Haul a big load of either clover or alfalfa hay into the hog lot and dump it in a sheltered corner. The hogs will soon find and appreciate it. In this manner you may be able to tide over until time to fatten them in the fall.

Turning Hogs in Diseased Pasture.

Is there any danger from putting hogs in the same pen and pasture next spring where sick hogs have been this fall?

Ans.: The sickness that affected the hogs is not stated, but presumably it was cholera. If no dead hogs or parts of such were near there would probably be no danger from putting hogs in the same quarters in the spring, but to make doubly sure, it will be a good plan to draw away all the manure from pens, scraping it up clean, and then using lime freely as a disinfectant over the yards and on the floor of the pens. This done, supply the place plentifully with bedding. The manure drawn away should be plowed under in a field to which the hogs have no access in the early part of the season. If the pens are thoroughly sprayed with some good coal tar preparation there should then be little danger on account of any previous disease.

Swine Diseases.

Abortion.

Please tell me the cause of sows farrowing two weeks before their time. I had eleven sows and eight farrowed before their time. Three raised fifteen pigs. The sows had a large place to run in with no cattle or horses near them and a large place to sleep and we fed them corn and oats.

Ans.: The only way to account for this is that the abortion might have been caused by their eating some ergotized grain. This will cause the trouble. It doesn't look as though the trouble was caused from any injury, as it is hardly likely they would all be injured the same way. If the male is sound and vigorous there seems to be no other way to account for it except in the feed.

Abscess Forming.

One of our hogs has been sick for the past few days. His left jaw is swollen and water runs from his mouth. He will eat swill, but cannot open his mouth for corn.

Ans.: There is probably an abscess forming in some portion of the swollen jaw, and the animal will get no relief until it breaks and discharges. There is very little to do. Foment the swollen jaw with hot water twice a day.

Probably an Abscess.

I have a sow with a sore on her cheek.

It is spreading now in spots. Is swollen some. Does not seem to cause pain.

Ans.: Secure the sow and make an examination of the sore and see if there is an abscess, and if there is, open it. Apply to the sore the following twice a day: Bichloride of mercury one dram mixed with four ounces of water.

Acid Stomach.

What causes hogs to grind and grit their teeth?

Ans.: Acidity of the stomach usually. Feed more charcoal and stop feeding milk for awhile and you will find they will stop gritting their teeth.

Anthrax.

Can you tell me what is the matter with my pigs? Their ears turn purple and their feet all swell up and they seem to be weak in their backs so they can't walk. In a few days they die. They are about four weeks old.

Ans.: Probably marshy pasture. Died of Anthrax.

Apoplexy.

I have a sow with six young pigs, three weeks old. The sow is in fine condition. The little pigs are growing fast and are very fat. Seem to be in good health one minute and dead the next time I look at them.

Ans.: It looks very much like apoplexy. Change the mother's feed and give her more roots, such as cooked potatoes or turnips. A complete change of feed for the mother is the only thing to do.

The Black Tooth Myth.

One of my neighbors is having bad luck with young pigs. They seem to thrive up to about six weeks old and then sicken and die. I examined one and found, as I believe, a well defined case of black tooth. Is there any scientific basis for the black tooth sickness?

Ans.: Black tooth disease is one of the cast-off theories that were relegated to the rear at the same time that hollow horn and a few other diseases were discarded. There may be a disease among swine which would cause the teeth to discolor but that would only be the effect, not the cause. You will gain nothing by working on the effect without first removing the cause. Scientific research proves this to be a fact.

Black Teeth not the Cause.

My young pigs sickened and died suddenly. On examination I found their teeth had turned black.

Ans.: The teeth did not cause the pig's death. There was something wrong with the mother's milk which caused the trouble. If you will give your sows before farrowing plenty of cooked roots, turnips or potatoes, and continue this feed for some time afterwards, you should not be troubled in this any more. Corn meal or pea meal or oatmeal is very good for the sows at this time.

Black Tooth.

Is black tooth in any way connected with blind staggers?

Ans.: No, they are not connected. When you are feeding a great deal of acidulated food it will often cause black teeth. The best way is to pick out the black teeth with a pair of pincers.

Blind Staggers.

What is blind staggers, and what causes it?

Ans.: Blind staggers comes from one of the great errors of feeding. It is not hereditary in swine. There are men who feed swine regardless of their powers of digestion and assimilation, and they gorge their animals with one kind of food. Suppose you feed your hogs on whey, and whey alone, and do not mix some oil meal and shorts with the whey, you will probably find you have blind staggers among your animals. When the digestive organs become so disturbed that constipation has taken place and digestion has ceased, inflammation of the brain sets in. Then the next step is blind staggers. The hog has a severe pain in its forehead, and it commences to run around in a circle, and is almost blind. The only remedy is to give the animal a physic. Give it some common clearing medicine to remove the constipation.

Blood Disease.

One of my sows farrowed three weeks ago. The pigs all died in twenty-four hours. A week ago I noticed bristles coming out. She is nearly bare now and the skin is of a reddish color, rough, dry, and pimply. She seems to feel all right and has a good appetite. I am feeding new corn and boiled potatoes in the swill.

Ans.: From the symptoms given, it may be hog cholera, although there are blood diseases that act very similarly. Give her a heaping teaspoonful of sulphate of soda in feed, three times a day. Use plenty of some good disinfectant where the animal lies and change the bedding every day.

Blood Disease.

My pigs were farrowed about the last of April. They did well until about six weeks old then some of them began to get poor. They would scratch themselves and scour some. They seem to want to eat, but do not eat much. They have black teeth. I have some of them shut up by themselves; others are getting better. Can't find any lice on them.

Ans.: Your pigs are troubled with a blood disease—probably from something they have eaten. You had better destroy the very bad cases and try to save the balance. Give each pig a tablespoonful of castor oil and it also will be well to dip the pigs in some disinfectant. Use disinfectants free-

ly in the pens and especially where the sound pigs sleep.

Blood Poison.

My neighbor has a lot of three-months-old pigs which have a peculiar ailment. First, the skin cracks, then hair and skin both peel off, leaving hide underneath dry and raspy; the tails also rot off and ears dry up to a shell. The pigs have a nice clean place to sleep and a pasture to run in, with oats six inches tall. How can the disease be checked?

Ans.: The disease is due to some poison acting on the nerves and blood vessels, deranging the action of both. Ergotized grain will produce the very effect mentioned. The matter should be looked into very carefully by competent authorities and the cause removed. You may have your local board of health call in the state live stock sanitary board to their aid, and they will send their veterinary surgeon to your assistance at once.

Brain Disease.

I have two pigs that lean their heads to one side and stagger around squealing. They have had plenty of exercise, and have been fed corn, skim milk and ground food.

Ans.: Your pigs are suffering from a brain disease, and they might as well be destroyed, as they will not recover. You had better make an entire change of feed with the balance to try and prevent others from contracting the disease.

Incurable Brain Trouble.

I have a pig that keeps running in a circle all day, even in the smallest pen, sometimes runs backwards and staggers, eats as much as two other hogs and still is poor. She always looks up with one eye holding head sideways, and is very restless. Is there any cure for her, and if not, is the meat good to use?

Ans.: Your pig is suffering from an incurable brain disease, and it would be an act of mercy to destroy it. There is nothing wrong with the meat if the sow is in good condition.

Brain Trouble.

A short time ago I bought two six-weeks-old pigs. Lately one of them began to have queer spells. When I fed them he would take a swallow or two and then throw himself back and begin to breathe hard, sometimes with his mouth open. Sometimes he will swallow the feed as if in pain, which is often followed by a chill. In a few moments he will be all right and go on eating again. Is there anything I can do in such a case?

Ans.: It is brain trouble and is only aggravated by excitement, especially after feeding time. He may possibly outgrow the trouble, although this seldom happens. There are no suggestions necessary except to keep him in a warm, well bedded pen and give him proper care.

Brain Disease.

Some of my hogs got sick a few days ago and stopped eating. They breathe hard and sometimes in a jerky manner. About the second day they get weak in the hind quarters, stand on their front feet, open their mouths, grit their teeth, shiver and act as though they had a spell of cramps. One died with its mouth full of foam. What can be done in such cases?

Ans.: The hogs are suffering from a brain disease and it is very hard to say what is the cause. It is probably due to indigestion. If you notice any others showing signs of sickness give them an ounce of Epsom Salts for a hundred-pound hog, and follow up every three hours with one-half dram of Iodide of Potassium. They are very unsatisfactory cases to treat.

Tumor in Brain.

I have a little pig that was a runt from the start; had him outside in open pen and it was wet most of the time. He contracted a cold, wheezes and is bloated. After awhile he got so that he couldn't run straight, but would go around in a circle of about three feet in diameter with head on one side, looking upward with one eye; he seems to have no control of himself.

Ans.: The cause of the trouble is due to a tumor or abscess located in the brain. It is an incurable case. The little fellow has probably been doing poorly a long time as these cases usually develop slowly.

Bronchitis.

Some of my hogs are coughing, especially in the morning. We feed the young pigs slop and corn; the old pigs we feed corn and water. They eat well and are all right otherwise.

Ans.: The hogs are suffering from a mild form of bronchitis, brought on from exposure during cold storms. Do not look on it as anything dangerous. Keep them warm and dry and comfortable and all will be well.

Bunch on Sow.

I have a sow that ran a stick in her neck toward the shoulder and could not use her leg for some time. It healed nicely, but there was a bunch there as large as a man's hand. Made an incision, but nothing appeared. Can she be kept as a breeder?

Ans.: It is not stated how deep an incision was made into the swelling. It is probable that within about two inches from the surface, pus will be found. In probing it after the skin is cut, do not use too sharp an instrument lest an artery should be cut. If the sow is very valuable there can be no serious objection to retaining her for breeding, but if she is not, it would be well, if the swelling does not subside, to have another take her place.

Catarrh.

What is the matter with my piggy sow? She is snoring and cannot grunt. She does

not seem to feel well and eats very little. Her nose is running as though she had a cold.

Ans.: Your sow is, no doubt, suffering from a catarrhal affection of the throat and head. You might give her a half teaspoonful of Chloride of Potash three times a day and if possible steam the head twice a day.

Choking Hog.

I had a pig choke very suddenly. I thought it was caused by a bone or some foreign substance in the throat, and could hear it breathe several rods away. I could find nothing to cause it to choke.

Ans.: Suffocation was caused either by spasmodic contraction of the larynx or paralysis of the parts. There was nothing that you could do to save the animal. The meat is healthy.

Report all Cases of Hog Cholera.

A neighbor of mine who is quite a swine grower has a disease in his herd which I think is hog cholera. He refuses to take any steps in the matter and I am afraid unless something is done the disease will spread to my animals.

Ans.: When an outbreak is feared write to Dr. Morton S. Whitcomb, Secretary of the Live Stock Sanitary Board, Old Capitol Building, St. Paul. Minn. Adherence to ordinary sanitary conditions, however, is always safer than to depend on any official board to set things right after the disease has once started. It would be well to notify your neighbor that there is a heavy fine for not immediately notifying the State Sanitary Board of all suspected cases of hog cholera.

Hog Cholera.

I am afraid my hogs have cholera. Is there anything I can do for them?

Ans.: The following is the government hog cholera remedy to be given once a day in doses of one tablespoonful to each 200 pound hog:

Wood Charcoal	1 part.
Sulphur	1 part.
Sodium Chloride	2 parts.
Sodium Bicarbonate	2 parts.
Sodium Sulphate	1 part.
Antimony Sulphate	1 part.

Pulverize and mix thoroughly. Separate the suspected animals from the rest of the herd and it would be well to treat the healthy animals as well as the sick ones to the same remedy as it may be the means of keeping the disease from spreading.

Cholera Preventive.

What should I do to prevent hog cholera?

Ans.: First breed from mature breeding stock so as to breed vitality. Avoid inbreeding so as to avoid breeding out vitality. Give them abundant exercise the year around and plenty of fresh clover pasture in summer. Avoid an all-corn ration but give them a variety of feed, including pumpkins in their season, and always give them plenty of ashes and salt in a dry place. In short, care for them in a manner to keep up the vitality and avoid as far as possible exposing the herd to cholera germs, by keeping all dogs off the premises, or stockmen who are likely to have been around cars or yards.

Hog Cholera Questions.

Hog cholera started in this section of the country last fall; it went through my herd and I lost 20 out of 25. They had all been in the same yard and slept in the same house. Five of them were not sick at all, and yet they were among the sick ones all the time. 1. Will those five be likely to have cholera within the next three months? 2. Would it be better for me to breed from one of the sows that has recovered or sell them all and buy a few pigs next spring? 3. How should I care for hogs when cholera starts in the herd so as to lose as few as possible?

Ans.: It would not be safe to say that the five animals will not have cholera at all, but they are not likely to have it. 2. It would probably be all right to breed the sows that have recovered. They and their pigs ought to be much less likely to take the disease if again exposed, although sometimes the pigs from such sows do not develop so well as from others. 3. When cholera strikes a herd, if possible, keep the well ones away. Put all the pigs, both well and sick, on a low diet, that is, on what is scarcely a maintenance diet.

Probably Cholera.

What is the matter with my pigs? They stop eating, hump up, cough and breathe very short and want to lie in their nest all the time. Will weigh 100 pounds. They were running out with good place to sleep and were fed separator milk with shorts and corn and a few beets. Once in a while they were given a little clover hay.

Ans.: It looks as though your hogs had cholera. Would advise you to remove the sound ones and disinfect your pen. Give the sound ones a mild purge, say a tablespoonful of epsom salts to each hog. Use plenty of disinfectants in the pens.

Cholera.

My hogs cough like a horse with the heaves. They do not eat well and their hair comes out in the advanced stages of the disease. I have them running at large and feed plenty of corn, milk and swill. They are in fair condition and weigh about 100 pounds. I killed one and the the liver was dark and greatly enlarged. In the inside it looked like clots of blood.

Ans.: Have your hogs examined by a competent veterinary surgeon, the symptoms resemble cholera. Use plenty of disinfectants around the place where they lie

at night and remove the sound ones away from the diseased animals. Disinfect every day.

Swine Immune from Cholera.

What kind of hogs, if any, do not have cholera? I have heard that Jersey swine with mule hoofs do not.

Ans.: It is not certain that any breed of swine will not take cholera. There is a breed which is sometimes claimed to be cholera proof. It is quite certain, however, that the Duroc-Jerseys are not.

Contagious Disease.

I bought a couple of registered Yorkshires recently. One had a light cough, but I did not think it serious. Now, some of my other hogs have died. One sow died, and during her last hours would bite and snap at everything. She would lie down on her belly and act as though she was in great pain.

Ans.: Your hogs are probably suffering from some serious contagious disease. Some of the symptoms you gave resemble cholera, others do not. I do not think treatment in the affected cases will accomplish much. The sound ones should be isolated and disinfectant freely used. Give the sound hogs a light dose of castor oil each, and follow it up in twelve hours with ten grains of quinine every four hours for two or three days. Keep plenty of clean straw in the pen and all the cold water they will drink. The affected hogs you may also give the quinine too as above and apply mustard to the sides of the lungs.

Constipation.

I have a sow that is lame in her hind quarter. She will stand on her fore legs and turn round. She eats and drinks all right.

Ans.: Feed soft feed such as boiled grain and roots. This trouble is usually due to constipation and by getting the bowels to move more freely you may cure the disease, but as a rule the treatment is unsuccessful.

Probably Constipation.

My sows are due the latter part of September. At times they become very lame in hind parts. They slide along rather than walk. Are in good flesh but not fat.

Ans.: The most common cause of the affection your sows are suffering from is constipation. Where the bowels are filled with a firm compact mass there is liable to be pressure on the nerves passing from the spine to the hind extremities, causing the animals to lose power of the hind legs. The only thing to do is to give a mild purge of castor oil, two ounces to each hog, and feed soft, easily digested feed. It is more difficult to treat the sows on account of their being pregnant, but the oil will not injure them in any way.

Remedy for Coughs.

Why do pigs cough, and what is the remedy?

Ans.: It may be caused by colds, dust, foul air, want of ventilation, wet and foul beds, unless it should be whooping-cough or pneumonia. If it is caused by any of the former, remove the cause. If caused by colds, smear the trough with pine tar. A little sulphur or a few drops of turpentine or kerosene in milk, and a warm, dry bed, will relieve them of a common cough.

Hogs Cough.

My pigs were weaned last week. The sow has a bad cough. It seems like whooping cough. I have two spring fattening hogs that also cough. They are fat enough to sell. I feed corn and some shorts in slop. They all eat and drink all right.

Ans.: If your hogs are fit for market you do not need to do any doctoring. To treat these cases properly they should be kept nice and warm and dry. Give a teaspoonful of the following, three times a day to each hog: Fluid extract of licorice, two ounces; liquid acetate of ammonia, six ounces.

Bad Cough.

My hogs are not doing well. They have a bad cough and some are very scabby; have been feeding them cooked feed and corn and they seem to have good appetites, but do not gain in flesh.

Ans.: Have a good, warm, clean pen, with nice, dry straw changed quite often. Feed liberally with good food about as you are doing and give following tonic: Sulphate of iron, one pound; powdered gentian, two ounces; pulverize, and give a teaspoonful to each hog twice a day.

Hogs Coughing.

My hogs are coughing. They seem all right otherwise. They eat well.

Ans.: It is very hard to say what causes the cough, but very probably bronchitis, which in some cases results in pneumonia. They may have taken cold. There is also a possibility that you have tuberculosis in the herd. Good nursing is all that can be recommended. Keep them out of storms or cold winds for a time until the weather gets warm. Allow them as much sun as possible.

Hogs Troubled with Cough.

My hogs are troubled with spells of coughing when stirred up a little. They are not poor, and I don't think they have colds.

Ans.: The coughing is probably caused by some irritation in the lungs or throat. This might arise from one of several causes, as for instance, going out from a warm pen into a chilly atmosphere. Damp bedding would also be an aggravating factor. It would be necessary to know

more about how they were managed before one could be quite sure as to the cause of the trouble. Whatever the cause may be, the swine should be fed liberally on warm food and should be well supplied with dry bedding. If they can also be given a little laxative food, say one-fourth pound of oil cake per head each day, they will probably soon recover.

Bad Cough.

I have some hogs that have a bad cough. Please give cure.

Ans.: Liquid acetate of ammonia, six ounces, fluid extract of licorice, two ounces. Mix well and give a teaspoonful three times a day to small pigs, and a dessertspoonful to hogs. Feed warm mash and allow them to run out in the sun as much as possible.

Bad Cough.

About two weeks ago I noticed that my boar had a cough and he shakes his head quite often. I keep him in a dry, warm place but the cough seems worse in the morning than at any other time. I feed him shorts, warm water and milk. He is gaining in flesh every day but the cough hangs on.

Ans.: Do not use the boar for breeding until you are sure what his ailment is. If the case should prove to be tuberculosis it would be very bad policy to use him. This disease is quite common among high bred hogs. Your care of him is all right and if he should improve and show good symptoms and cease coughing, you need have no fear.

Dead Pigs.

What is the cause of a sow having dead pigs?

Ans.: A great many causes might be given. Usually it comes from injuries received by the sows being run by horses or by dragging themselves over bars and other obstructions. Sometimes it comes about by sows being compelled to sleep in such cold places that they pile up on each other to keep warm and thus kill the young pigs before they are born.

Deafness.

What is the cause of brood sows becoming deaf after they are one and two years old? Some of them grow deaf and blind. I have now a Berkshire sow, one and one-half years old, which is getting deaf. I have a good hog-house, use good, dry bedding, and clean out often.

Ans.: If deafness follows in a herd, from dam to daughter, the cause is hereditary. This is not uncommon. Either change breeds or strain. Get sows of a new strain of blood, if the breed is preferred, as it will follow through many generations unless caused by outside influences.

General Debility.

My hogs are not doing well; they have no appetite, they cough, get scabby and break out with sores. What can be done for them?

Ans.: Mix about a teaspoonful of sulphite of soda with feed for each hog three times a day. Change feed regularly and bed with clean oat straw or wheat straw; do not use buckwheat straw or unclean bedding of any kind.

Deformed Pigs.

I have ten sows to have pigs, and three have farrowed. Each sow has had one or two pigs that are not developed, have no eyes. One sow had eight living and two dead, one had eight and six lived, and the other had twelve and ten living. Now I would like to know what is the cause of each having pigs that are not developed. The sows are a little over a year old and have been running at large. I have fed corn twice a day. They got with pig by a young boar, but no relation to the sows.

Ans.: This is one of the freaks of nature, which man cannot account for. The only way in which the cause can be explained is too close in-breeding.

Dilation of Meat Pipe.

We have a boar about a year old that does not feel well. Every time he drinks he presses his nose against the ground a few minutes. I cannot see anything else the matter with him. He is very greedy when eating or drinking. I have him on good clover and grass pasture.

Ans.: The trouble with the boar is dilation of the passage from the mouth to the stomach, commonly called the meat pipe, caused from being severely choked at some time. It may never hurt him but cannot be relieved.

Doctoring Pigs.

What is the best way to doctor pigs so as to keep them healthy?

Ans.: The best way to doctor a pig is not to allow him to get sick. Give him a frequent change of bedding, a clean pen, plenty of good, healthy food and lots of room to exercise and it will save you some disagreeable work. It isn't easy to give medicine to a sick hog.

Eczema.

What is the matter with my hogs? A watery substance exudes from the skin causing the bristles to be constantly wet; on some, down the sides as well. It does not seem to affect them much as they have good appetites and appear to be well.

Ans.: This is, no doubt, a case of eczema. If the weather permits, wash them with warm water and tar soap, three times a week, and a strong solution of creolin should be applied over the affected parts after washing. Change their bedding often and keep the pens as dry as possible.

Eczema.

My pigs are about a month old and seem to be rubbing all the time. They are Chester Whites, but some of them are

so scabby that their skin looks nearly black. Please tell me what I can do for them.

Ans.: Your pigs are suffering from eczema. Change their bedding frequently, and, if the weather will permit, wash them thoroughly with tar soap twice a week. Then wash them in a solution of some good coal tar preparation.

Eczema.

My hogs have a scale on their backs extending down the sides about six inches. They rub on anything that will answer for a rubbing post.

Ans.: Your hogs are probably suffering from eczema though it may be mange. They should be thoroughly washed with tar soap and water three times a week until the disease disappears. Twice a week apply crude petroleum over the diseased parts. Keep everything clean that they use to rub against.

Sore Eyes.

My pigs are troubled with sore eyes. I have some spring pigs that are nearly all troubled this way. They can scarcely see each other. What can I do for them?

Ans.: There is no doubt a skin disease around the eyes. You should not let the diseased ones run with the sound ones. Wash the sore eyes once a day with warm water and then you may apply the following: Boracic acid, one dram; water, eight ounces. Dissolve thoroughly and apply this solution twice a day. Use plenty of disinfectant about the pens where the diseased pigs sleep; any of the coal tar preparations will do if used thoroughly.

Sore Eyes.

A sow that I bought a year ago has gone blind. Two of her pigs have sore eyes now and another is blind. What is the trouble?

Ans.: The hogs have an incurable affection of the eyes, and you had better get rid of this family and buy another of the same breed. You will probably have more or less trouble if you do not change as the disease is hereditary.

Sore Feet.

My pigs have been kept on a cement floor all winter and there seems to be a great deal of inflammation in the sensitive parts of the hoof. Would it do any good to poultice them?

Ans.: Poulticing the feet is practically impossible under ordinary circumstances and is therefore hardly to be recommended. If the sores between the claws of the hoof are due to some foreign substance, the part should be thoroughly cleansed with warm water and soap to remove the dirt and if proud flesh appears a little ter-chloride of Antimony should be applied at once. If this doesn't remove the proud flesh by the end of the third day it should be applied again. The sores can then be healed by using some kind of zinc ointment but should be washed and dressed once or twice a day according to the severity of the sores. Pigs that are so troubled should always be kept on a clean floor while being treated so as to prevent infection from other sources.

Feverish Sows.

I have a sow that became feverish after farrowing, what should I do?

Ans.: Feed her some raw potatoes or roots; they are laxative, and if it is a real bad case of caked udder, so the pigs can't nurse, rub a little kerosene in the udder. However, prevention would be better than cure. Feed properly, give plenty of exercise. Provide salt and ashes and fresh water all the time.

Probably Fever.

I have a sow that shed all the hair off her back and sides during the winter. What caused it and how can I make it grow again?

Ans.: The question cannot be satisfactorily answered without knowing how the sow was fed and how cared for. A fevered condition of the system might account for the loss of hair and this would be induced by food too carbonaceous, as corn or rye. The trouble might arise from an unhealthy condition of the system, which might be brought on by various causes. When pigs have hog cholera they sometimes lose nearly all their hair. As soon as the sow is brought into a thrifty condition, especially after a period of grazing on good succulent pasture the hair should grow on again.

Pigs Have Fits.

My pigs are troubled with what seem to be fits and many of them die. What is the cause?

Ans.: The cause is usually stomach trouble. Give each fifty-pound pig a tablespoonful of epsom salts and grade the dose according to size. Feed light food for a few days. Do not give any shorts or grain of any kind for a week. Where the hogs show signs of the disease you may give one-half teaspoonful of bromide of potassium every four hours in a little water, as a drench. Careful dieting is the only precaution.

Indigestion.

I have some pigs seven or eight months old that go to the trough, take a mouthful or two of food and then stumble back on their haunches or fall over on their sides and shiver with their mouths open. In five or ten minutes they seem all right again. This will continue from four to six days when they will get sick and stay in their beds and grunt. They die a few days later. I feed a little milk and swill from the house with shorts and shelled corn. Is shorts good for young pigs?

Ans.: There is evidently something wrong about the digestion of the pigs, but what it is would be hard to tell. Do they have an opportunity to exercise? If not, give them their liberty at once. Shorts and milk are both good for pigs of that age and a small amount of shelled corn is also helpful. You might give them a small dose of linseed oil taken along with the food or given directly.

Indigestion.

I have a lot of April pigs and some are affected this way: About two months ago one died and four more are now sick. They don't appear to be sick till the last day, they lie down and never get up again. They have a jerking or twitching in their sides for at least three weeks before they die. They coughed in the fore part of the summer. Were out on pasture and fed ground oats. Since August they have been running at large and have had corn and separated milk from the creamery.

Ans.: It looks as though they were troubled with indigestion. Change the feed, giving soft, easily digested food to the sound ones. Be sure to keep them warm and dry. Do not feed any more corn for a week or so. Remove the sound ones to a separate enclosure and if possible give each pig a tablespoonful of epsom salts. Do not let them run at large for the balance of the cold, wet weather.

Indigestion.

My hogs lose the use of their hind quarters, but seem all right otherwise. They eat their food the same as usual. Please give cause and cure.

Ans.: Feeding too regularly and too long one kind of feed is considered the cause, as it is liable to bring on indigestion and bowel trouble. Give a laxative to each animal affected as soon as you notice it coming on. Keep dry and warm and give pure air and as much sun as possible. A tablespoonful of epsom salts to a hog weighing one hundred pounds is enough for a laxative.

Indigestion.

I fed my brood sow ground oats and barley and four to six ears of corn at each meal. A few weeks ago she could not walk. She has not lost flesh but is still bad in legs. What is the cause of this trouble?

Ans.: The proportions of the oats and barley are not given, but if barley was fed freely and then considerable corn, as is stated, the diet is too carbonaceous. It is probably indigestion, and the sow is or has been constipated. If so, the carbonaceous food and the constipation will probably account for the lameness of the sow. The remedy would be a change of diet. Withhold the corn and feed more shorts, bran or field roots.

Indigestion.

I have a young pig that has been off her feet, being weak in all four legs. She is very weak in the legs and can just hobble along. What can I do for her?

Ans.: Feed the pig soft food and have it warm if convenient. A little linseed meal once a day will keep the bowels loose. Indigestion is the cause. With careful feeding and a little salt once a week, clean water and no milk she should be in good shape in two weeks.

Indigestion.

I have two pigs. One has a cough and wheezes after eating. They eat and drink all right but seem to be troubled in their hind quarters and often go around kicking themselves.

Ans.: The trouble is due to indigestion. If the hogs continue to cough and show an indication to a falling off of flesh you had better destroy them and take no chances in keeping them with sound hogs.

Indigestion.

My sow is lame in her hind quarters. About three weeks ago the lameness went to her shoulders. What can I do for it?

Ans.: The cause of the lameness is due to indigestion. You must give an entire change of feed and if the bowels are constipated it would be well to give a tablespoonful of epsom salts in her feed. This dose is for a hog weighing 150 pounds. It is doubtful if she will recover. If you have to kill her the meat is good.

Indigestion.

My pigs seem all right until they begin to drink swill, when they squeal and tumble over, shake and tremble, lie awhile and finally get up. What is the cause?

Ans.: The pigs are troubled with indigestion. Feed less and give more exercise.

Injured Sow.

Not long ago I took the pigs away from a sow to wean them and turned her out into a pasture. The other hogs fought and ran her. The following day on turning her out of her pen, she could not stand on her front feet, but would crawl around on her knees apparently not having enough strength in her knees to support her body. I have been feeding her new corn, soaked oats and slop made of shorts with a little milk added. What is the trouble and remedy?

Ans.: The sow has been injured by the other hogs. From the description given, it would hardly be possible to tell what parts are especially injured, but probably the muscles of the limbs. The chances are that she will recover in time if kept away from those that worry her. It is doubtful if medicines would be of any service.

Internal Affection.

I have a three-months-old hog that eats and drinks all right and seems to be doing fairly well. He holds his left ear down, and takes spells of running around the pen, and also has a light whistling in

his throat; yellow water runs from his eye.

Ans.: The case is a very unusual one. It might arise from various causes, but most likely there is some internal affection in one side of the head which affects the brain, sympathetically or otherwise. It would be well not to keep the pig too long lest he should turn up missing some morning. His present condition would seem to indicate that, minus the head, he is all right for food.

Itch.

My hogs seem to have an itch. I am feeding them ground barley and have given them some sulphur.

Ans.: The sulphur is all right if not given too freely. The hogs should be bathed once or twice a week with a strong solution of any of the good coal-tar disinfectant dips.

Itching Hogs.

What is the matter with hogs that rub against everything they come to? If it is a skin disease will the germs of disease remain on posts?

Ans.: It may be lice, or it might be some skin disease. In either case use some sheep dip. Dip the pigs just as you would sheep. Apply some also to the posts and to the sides of the pen where the pigs have rubbed. In about ten days go over the work again to make sure of a thorough job.

Kidney Trouble.

I have a boar pig that is weak in the kidneys and lame in the back. He has a fine appetite and is in good flesh. What can I do for him?

Ans.: Feed the hog soft feed for two weeks or more, and give a teaspoonful of powdered nux vomica on feed twice a day. Keep him in a dry pen with good bedding. Allow plenty of exercise.

Pigs Go Lame.

I bought a pair of pigs that were in fine condition. A short time after I got them they had some trouble with their feet and would get up and walk to the trough and go through all sorts of motions. Some would walk on their knees, others would cripple along on all four feet, then suddenly fall over on their heads or sides.

Ans.: The pigs have evidently been fed high since they were bought. If they have not had the chance to take free exercise under such conditions, that alone will probably account for the lameness. If they were allowed to lie on damp or steamy bedding, that may also be an aggravating cause. It is possible to put pigs off their feet in the winter by simply confining them too closely when pushed with feed, even though the food should be all right.

Lame Hogs.

Last fall we built a hog house with bins 8x9 feet, and board floors. Some of the pigs have been troubled with their feet and can hardly walk. Did the board floor cause their lameness, or have they had too little exercise? They have been in these pens all winter.

Ans.: The board floor is not the cause of the lameness. It is probably caused by too little exercise in connection with the kind of food they have been getting. Pigs should never be in such small quarters for so long a time. They must have exercise to be healthy.

Leg Weakness.

My pigs are troubled in their hind legs. They get stiff and are unable to walk. What kind of dope or stock food can I use?

Ans.: There are two affections that will stiffen the pigs as you mention. There is a rheumatic affection, which affects the joints, usually the hind legs worst, and the animals lose power of their limbs. There is always a swelling of the joints. The other affection is a spinal disease which comes on gradually and generally shows in the hind legs. This is usually brought on from indigestion, and if taken in time can be relieved. If your animals are healthy and thrifty you had better leave them alone and not dope them. Remove the affected hogs to a separate pen, so they cannot be abused by the others. Feed the sick ones cooked grain and roots for a short time. Give ten drops of tincture of nux vomica on the feed of each hog three times a day. Change feed for a week on all the drove. If the crippled hogs are in good flesh you had better butcher them.

Pigs Losing Use of Hind Legs.

What is the cause of my pigs losing the use of their hind legs, and what can I do for them?

Ans.: Sometimes rheumatism cripples pigs and sometimes it is paralysis. In either case give the affected pigs good, warm, clean sleeping quarters and soft feed. Avoid feeding too much corn.

Weak in Hind Legs.

What can I do for my pigs? They cannot stand on their hind legs. I am feeding corn, oats, barley, wild hay and some grain every day.

Ans.: It is doubtful if you can keep the pigs as the affection is a very serious and fatal one. Change the fed and give cut potatoes or turnips with bran mixed with it to which is added a little salt. You may give each hog a dose of salts, a tablespoonful for a one hundred pound hog is the right amount, and should be mixed in the food. It is also advisable to apply a mustard plaster to the back over the loins once a day for three days. Keep the pigs warm and dry with plenty of pure water to drink.

Weak in Legs.

I am troubled with my pigs nearly every year. When about four or five weeks old they seem to get weak in the back and lose the use of their hind legs and in some cases they lose the use of their fore legs also. We used turpentine both internally and externally and it seems to have fairly good results. Please tell me the cause and give a cure.

Ans.: This disease of small pigs as well as large ones is a very serious one which has proven very hard to combat. It is very difficult to state the cause. There certainly is a nervous trouble usually confined to the spine, as only the hind quarters are affected, although in some cases the front quarters are also. Then it emanates from the brain. It is usually due to the food they eat which causes indigestion and a congested condition of the membranes of the spinal cord. The pressure then causes paralysis. The most effective thing is to move the bowels with a physic and feed laxative foods until the pigs regain the use of their legs. Local treatment is beneficial.

Weak Hind Legs.

What makes hogs weak in hind legs and still able to eat?

Ans.: Overfeeding on an unbalanced ration, or wet, damp or cold sleeping quarters. Sometimes intestinal worms will cause weakness in the limbs.

Lousy Hogs.

Will kerosene kill hog lice? If so, how should it be applied?

Ans.: Kerosene emulsion is good for hog lice. Kerosene, two gallons; common soap, one-half pound; hot water, one gallon. Mix hot and spray both hogs and pen. Clean out all the pens before spraying and see that the hogs are given fresh, clean bedding.

Lousy Pigs.

My pigs are covered with what look to be hog lice, although I am not sure as I never saw them before. Is there any home treatment I can use to kill them?

Ans.: Many old breeders scrub lousy or scabby hogs with buttermilk, although crude petroleum mixed in the proportion of one part of oil to forty parts of warm water is better.

Hogs with Lice.

What can I do to rid my hogs of lice?

Ans.: In cold weather you can apply Persian insect powder. Apply every three days and change the straw frequently. Brush the hogs with a good stiff brush twenty minutes after applying the powder. In warm weather dip the hogs, using one of the coal tar preparations.

Lice on Hogs.

I have two hogs that I notice have quite a number of lice on them. I hardly think it would be profitable for me to buy a dipping tank just for two hogs. Is there any other way whereby I can rid these two animals of lice?

Ans.: In such cases as yours an old sponge may often take the place of the dipping tank. Saturate it with the solution, and squeeze it out all up and down their spinal columns on both your hogs, allowing it to run down on both sides. Be careful also to examine thoroughly behind the ears and in the creases under their jowls and between their hind legs. These are common hiding places for hog lice.

Lice on Hogs.

My hogs are troubled with lice. What can I do for them?

Ans.: Any of the coal tar preparations manufactured for this purpose will kill lice on hogs, but if you have none on hand, a kerosene and water spray will soon kill hog lice. Then thoroughly whitewash the pens.

Lice on Swine.

I would like to know something about lice on swine. I have just bought a registered Berkshire and have now discovered that he is covered with lice. I never saw them on hogs before. How can I get rid of them, and what is the reason for hogs getting them?

Ans.: Swine can only get lice by coming in contact with other swine thus affected, or by coming in contact with bedding or surroundings which such infected swine have frequented. You can get rid of them by mixing sulphur and lard and rubbing on all of the infected hogs. You may have to renew the application at intervals of one week. Another plan is to use kerosene very much diluted with warm soapy water. Apply it with a brush and sprinkle some of it over the bedding and around the pen in which the animals are kept. This may have to be applied twice, also. If the kerosene is not sufficiently diluted it will blister the skin. Any of the coal tar preparations recommended for sheep dip will kill hog lice.

Lump on Pig's Nose.

Please give remedy to cure a lump on the side of young pig's nose. I am losing all my young pigs from this and don't know what to do for them.

Ans.: You probably will be unable to save any of those affected. Change them to a different pen and give an entire change of diet, which may assist in the treatment of the well ones. It would be well to use chloride of lime sprinkled around their pen, and also give a little lime water in their feed twice a day. If you have any showing enlargement of the head, apply tincture of iodine with a feather or brush once a day over the swelling. It is

almost impossible to save the diseased ones as they are delicate little animals to treat.

Lung Fever.

My pigs are taken sick with some disease and after lying around under their bedding, breathing like a horse with the heaves, they die. The sow is in good condition and has been fed ground corn. They have all been in a warm barn.

Ans.: From the description given it looks as though your pigs had lung fever. There is very little to do for little pigs of their age.

Lung Fever.

Is there anything called "black teeth" in young pigs? I am losing a great many pigs this spring. They are mostly from two to three weeks old when they die. They fall off in feed, ears drop back against body and they grind their teeth together. Their sides work in like a blacksmith's bellows.

Ans.: From the symptoms given it looks as though the pigs died of lung fever, which they probably contracted during the change of weather in the spring. Keep the small pigs in a comfortable place, especially during cold, damp weather in the early part of the year. As to black teeth, it is a myth. It is an old theory, long exploded.

Cause of Mange.

I have five shoats that have been out quite late in the fall and their yard was in a pretty bad condition before I housed them. I notice that they are all pretty mangy. Is the yard responsible?

Ans.: Mange or other skin diseases are often caused by filthy conditions. This is not only true of the yards, but also of the bedding. Wash your shoats with tar soap and warm water every other day until they are in their normal condition, and be sure to have their bedding changed every day.

Bunches in Mouth.

What makes bunches in pigs' mouths? Last summer I had some the same way and attributed it to dirty water. But this year everything was clean. They had fresh bedding and plenty of exercise. Is the disease contagious?

Ans.: The disease is a very peculiar one and does not appear to be a common sore mouth from stomach trouble, although it probably originated from the stomach. It may be contagious, and to make sure you had better disinfect your pens freely with a strong solution of some good coal tar preparation. Allow the little pigs lots of exercise in the sun. It is essential to their good health.

Canker or Sore Mouth.

I have had a great deal of trouble this spring with my pigs that are troubled with sore mouths. What can I do for them?

Ans.: The trouble is generally known as canker or sore mouth and is probably due to unhealthful milk from the sow or from poison on her teats which is due to contact with poisonous vines or wet grass. Swab the pigs' mouths out thoroughly with a solution of carbolic acid and water sufficiently strong to make the flesh upon the arm tingle. Apply with a rag or small piece of sponge tied to a stick. Strong sage tea applied in the same way is good, and in addition, blow powdered sulphur through a straw into the pigs' mouths Both the sow's teats and udder should be bathed with a weak solution of carbolic acid and keep afflicted litters away from the other pigs. Be careful not to overfeed the mother when the pigs are young and give the pigs good, clean pens, clean beds and a clean place to run.

Canker in Mouth.

I have some pigs that are troubled with sores on inside of jaw close to the bone. It is a hard substance the color of matter. Those affected on the lower jaw invariably recover, but those affected on the upper jaw usually die. I have bathed the affected parts with diluted carbolic acid, and think it helped some. The sows have been fed all winter on ground barley and oats steamed in equal parts, with an ear of corn night and morning. It seems to affect them when about two weeks old.

Ans.: Your pigs are suffering from cankers or sore mouth, which is a very serious affection in such young animals. Use disinfectants freely about the pen and apply penciled nitrate of silver once or twice a day. Do not overfeed the sow, and be sure to provide plenty of clean, dry bedding.

Sore Mouths in Pigs.

My pigs are troubled with sore mouths. What is the cause?

Ans.: Keep the pen clean. It is brought about by filth. Use plenty of disinfectants about the pens and yards and keep them clean and well bedded.

Pigs With Sore Mouths.

I have been feeding my young pigs with dry corn and their mouths are all sore. How can I remedy this trouble?

Ans.: Dry corn will hurt the teeth and make the mouth sore. Shorts or oats should be given in the place of soaked corn as soon as the pigs learn to eat fairly well. Give them skim milk if available, if not, a thin slop made of water and shorts.

Sores on Mouth.

I have some young pigs that have sores around the mouth that work back over the body. The hide gets hard and cracks. They get poor and stiff and are chilly all the time. At last they die.

Ans.: Use a good strong disinfectant in the pen and over the little pigs' bodies, and also on the mother. By using it free-

ly you can check the disease. Any of the coal tar preparations will do.

Bunch on Navel.

I have a two-month-old pig that was all right when born, but shortly after a bunch came on his navel. It has kept growing and is now about six inches around, dragging on the ground.

Ans.: Turn the pig on his back, have him well secured and make an incision through the center of the bunch with the small blade of a knife or lance. Be sure to have the knife clean before operating, and wash the parts thoroughly with carbolic solution. If you find pus or serum make a good large opening. Keep the parts thoroughly cleansed. If it is a tumor you will find no fluid, in which case there is nothing to do but dissect it out.

Overfeeding.

What makes pigs run to the trough, eat a little and then whirl and seem to have fits?

Ans.: Overfeeding is the cause. Get them out on pasture if possible. Cut off the corn for a week or two and keep them on more of a vegetable diet. Feed plenty of roots with middlings slop and keep ashes or charcoal before them all the time as a bowel regulator.

Paralysis.

My sow had little pigs about six weeks ago. Now she is crippled in the hind feet. What is the trouble?

Ans.: There is paralysis of the hind extremities. Feed soft feed, cooked potatoes and roots, but no grain for a few days. Give her a teaspoonful of tincture of nux vomica on feed three times a day. Keep the bedding dry and furnish plenty of it.

Pigs are Paralyzed.

My pigs have some kind of paralysis. They have no control of their hind legs, otherwise they are perfectly healthy and are doing well. I feed some corn, oats and about 120 pounds of sweet milk per day. Their appetites are good. They have the run of pasture, which contains clover, rape, oats, timothy, bluegrass and numerous kinds of weeds, which they relish. They are from six to eight weeks old.

Ans.: This affection is usually brought on from rich food and usually food that is hard to digest, causing indigestion, which results in the paralysis you mention. They are very unsatisfactory cases to treat. You may give each a tablespoonful of castor oil on an empty stomach and apply a thin mustard application over the loins of each every other day for three or four times. If they are constipated, stop the milk for ten days or more.

Paralysis.

I have a hog that drags her hind legs. She drinks very little but eats well. What is the trouble and what shall I do?

Ans.: Would not bother with her. Kill her and get her away from the rest of the herd. Animals rarely recover from paralysis of the hind quarters, and if they do they are often not worth the trouble.

Piles.

I have some pigs that are bothered with piles. I lost ten fall pigs last winter with it, and now the spring pigs are getting it. I am feeding buttermilk and shorts. What is the cause of the trouble?

Ans.: The shorts is the cause of all the trouble with your pigs. Stop feeding shorts and change onto another feed for a while. Put a little linseed meal in their food for a week and your trouble will soon cease.

Pigs with Piles.

My pigs are troubled with piles. What can I do for them? I am feeding shorts.

Ans.: Change the feed. Shorts certainly cannot agree with the pigs. Drench all that show an inclination to piles with a tablespoonful of salts.

Piles.

What is the cause of piles on pigs, feed or cold weather?

Ans.: It is very likely due more to the feed than the cold weather, deranging the bowels and liver, causing the hemorrhoidal veins to congest.

Piles in Hogs.

What causes piles in hogs and what is the remedy?

Ans.: Constipation. Let every swine breeder note this. It is the forerunner of many diseases and troubles with swine. It is what is generally termed "bad luck." It is always caused by feeding any one kind of food to excess, such as skim milk, buttermilk, or any one kind of grain. Take some jimson weed and mutton tallow, make an ointment of it, and with the fingers moisten with this between the rectum if protruded. Use it internally and externally and feed a loosening and cooling diet.

Pneumonia.

One of my hogs has a bad cough. He has trouble breathing. He coughs all the time. Is it cholera?

Ans.: The hog is suffering from pneumonia and probably pleurisy as well. You may give it fifteen grains of quinine at a dose every three hours which may help, if not too late. Keep the other hogs separate, and give them plenty of clean straw to keep them warm. Hot mashes are very good. There is not much danger of serious trouble, such as cholera, or you would have noticed it.

Pneumonia.

I lost a hog that had a cold and cough-

ed; he ate and drank until the third day and then I decided to butcher him. I did not like the looks of the lungs after I opened it; it looked like some disease. What can it be?

Ans.: Your hog had an attack of pneumonia and the lungs had not regained their normal condition. Do not take any chances with the meat, as it must be fevered from the disease.

Poor Hogs.

I have two poor hogs. I feed them carefully, but they don't do well. How should I feed them?

Ans.: First give each hog a tablespoonful of epsom salts, and after twenty-four hours repeat if the bowels do not move freely. After two days commence giving soft feed, such as boiled barley or oats, peas or any grain you may see fit. Give cooked potatoes or turnips and a little milk if you have it. This may help if they are not too far gone.

Rheumatism.

I have a sow with rheumatism in the hind legs. She drags herself along with her front feet. Can I cure her, or shall I fatten her?

Ans.: It will be difficult to get her fat while in that condition. To fatten her is about the worst thing to do. If you keep her you will be forced to feed her mostly soft feed. The only internal treatment would be fifteen or twenty drops of tincture of nux vomica twice a day. Keep dry bed and warm pen and do not allow her to be out during wet weather.

Rheumatism in Swine.

Is there any cure for rheumatism in hogs and what is it? Is their meat fit to eat?

Ans.: Rheumatism in swine cannot be quickly cured if at all. Sometimes it can be removed in the course of a few weeks. Much depends on the case. If caused from feeding too much corn, the feed should be changed and the pigs put on a light diet. Encourage them to take plenty of exercise such as rooting in the barn yard, if in the winter. If the trouble is caused by damp pens or bedding, the defect should be remedied. If measures are promptly adopted at the first, the pigs will probably get well, but a good deal of time is required. If the rheumatism is not severe the carcass should be fit for meat especially if the pigs are in good health otherwise.

Rheumatism.

My hogs seem to be troubled every winter with rheumatism. Can you suggest any cause for it?

Ans.: Rheumatism is getting to be a too common ailment of the hog. He should be provided with dry quarters and a more frequent change of bedding. Don't allow hogs to sleep on a cement floor; this will give them rheumatism quicker than anything else.

Treating Ruptured Pigs.

Nearly every year I am troubled with having one or more of my boar pigs ruptured so that the scrotum becomes very much inflated with the intestines. Is there anything to do in such cases other than killing the animal?

Ans.: In treating this disease some farmers castrate the animal, push back the intestines and sew up the opening, but this is a serious operation and generally proves fatal. A safer and easier way is to use clamps. Turn the hog on his back and gently push the intestines back into place. Then draw up the scrotum with the testicles and screw on the clamps back of them. By the time the testicles slough off the opening in the abdomen will have closed. Of course, hogs that are treated this way must be confined by themselves during the operation and should be given the personal attention of their owner. If swelling takes place, which is very probable, the parts should be frequently bathed in hot water and afterwards with the following solution: Sulphate of zinc, half an ounce; Acetate of lead, half an ounce; water, one ounce.

Ruptured Pigs.

Can you tell me the cause of a sow farrowing ruptured pigs? 2. If a boar takes his time and serves a sow but once, is it enough?

Ans.: It is not uncommon for a sow to throw ruptured pigs. Do not breed this animal again. Breed only sound females or those that produce good sound animals. 2. One service is as good as two if both animals are in sound health.

Scab.

I have five cases of scab in a bunch of shoats. Some are pretty bad. What is the best treatment?

Ans.: The best treatment known is to give the pigs a bath in tar soap and hot water twice a week. When dry, apply crude petroleum all over the diseased skin. This is applied twice a week and is very effectual. Keep the diseased pigs isolated and thoroughly clean and disinfect their pen with a coal tar disinfectant.

Scurf.

What is good for scurf in hogs?

Ans.: First clean, dry beds, but when once affected wash them thoroughly with a cloth or brush, with strong soap suds. When dry, sponge them with carbolic acid, diluted, till it makes your arm begin to tingle, or use kerosene oil. Two applications will generally cure them.

Imperfect Sheath.

I have a Poland-China boar, seven months old. He has a growth as large as

a big apple on his sheath. Urine lodges in it. It has been growing about three months. He is in good condition otherwise. What can I do for him?

Ans.: Turn the animal on his back and have him held securely while you make a careful examination of the part. If you find the opening in the sheath imperfect you had better make a free opening with a sharp knife. If it is a tumor or fungous growth, the only thing to do is to dissect it out. Be careful to keep your hands clean during the operation or infection may set in. Keep the boar by himself and see that his pen is cleaned out every day and that plenty of clean, fresh bedding is provided.

Sores on Hogs.

Last summer my hogs got sore noses, eyes and tails. The skin would crack and when the scabs came off would leave raw sores. I feed them mostly corn and slop from the house with milk in it. This spring my little pigs, a week old, are affected the same way. Although I have not lost any, my neighbor has from the same disease. They appear healthy and always eat all we give them.

Ans.: The cause may be due either to the feed or something wrong with the sleeping quarters. It would take a personal investigation to find the cause. At any rate, you will do well to use plenty of disinfectant about the pens.

Spinal Trouble.

I have five August pigs, two of which got crippled in their legs. I fed them corn, warm slop of buttermilk and ground feed.

Ans.: Your pigs are suffering from spinal affection due frequently to indigestion. Change your feed entirely. Feed soft cooked feed and more roots. If the bowels are constipated, give a physic.

Pigs with Spine Affection.

My pigs are about two months old, but seem to have no strength in the hind legs. They are healthy and have good appetites.

Ans.: Your pigs are suffering from a spinal affection, no doubt caused from some indigestible food. Change your feed and give easily digested food for a week or two, with the following medicine: 10 drops of tincture of nux vomica every five hours for four days and then give 12 drops three times a day for a week. Apply a weak solution of mustard over the loins twice a week. Keep the pigs dry and clean. Your cases are very serious and recovery is doubtful.

Spinal Disease.

I had a sow that I had been fattening to butcher. From time to time she got lame and poor, and now she cannot get up to go to the trough. She can't straighten her forelegs. She crawls on her knees. Can't eat much. Her weight is 350 pounds.

Ans.: It is undoubtedly a spinal disease, very like softening of the spinal cord, causing paralysis. There is no help for the animal and you had better destroy her as she will continue to lose flesh and gradually grow worse until she dies.

Spinal Trouble.

One of my sows seems to have some trouble in the hind legs. She can hardly get up and the legs seem to grow weak. Will not eat any food. Do you think it due to any spinal trouble?

Ans.: It is surely spinal trouble which usually has a fatal termination. Give her a purge. A tablespoon of epsom salts in luke warm water is very good on an empty stomach. Follow this up with ten drops of Tincture of Nux Vomica three times a day. Feed laxative food.

Spinal Disease.

My one-year-old sow has seven pigs 18 days old. The sow seems to be hurt or weak in the back, and squeals when getting up. She can scarcely walk or stand. Has refused food for a week except for a little sweet milk and some raw meat. She is constipated and her manure is black and dry. She weighs about 300 pounds and is in good flesh. The pigs are still nursing her. Should I take the pigs from her? They seem hungry all the time but look all right. What can I do for the sow?

Ans.: Your sow is affected with a spinal disease. If you have any convenience for raising the pigs, or a foster mother to put them on, you had better do so. Apply a mustard plaster over the loins, covering the mustard with paper and cloth, to keep the cold air off. Repeat the mustard application every day unless the skin gets sore. Give the sow internally, one-half teaspoonful of bromide of potassium three times a day, and if the bowels are constipated, as they usually are, then give a tablespoonful of salts and feed only soft food for a week. This is a very serious affection especially with a large heavy animal.

Spinal Meningitis.

Eight or ten of my sows want to sit down when they eat. While standing they keep stamping their feet. My pigs are troubled the same way. I only raised pigs from one sow that had the disease and her pigs were all right. They have all the exercise they want.

Ans.: Your pigs are affected with spinal meningitis. Those that lost the power of their hind legs and died had softening of the spinal cord which is always fatal. It is impossible to state what caused the disease. It was possibly due to something they had eaten. If your state veterinarian is notified through your local board of health, he will help you out. This is what you had better do.

Hogs Weak in Back.

I have some young hogs that are weak

in the back. Some can scarcely walk. Can I do anything for them?

Ans.: It is probably too late to do anything, as these cases are usually hopeless from the start. It is a spinal trouble, and one which rarely can be cured. The only thing that you could possibly do for the pigs would be to give them a laxative. A tablespoonful of epsom salts to a fifty pound hog. Give ten drops of tincture of nux vomica to each hog three times a day.

Spinal Trouble.

I have a young sow that had pigs about five weeks ago. She did well for about four weeks and then suddenly seemed to lose the use of her hind quarters. If her hind legs are moved she squeals as if in pain. Her appetite is good. Is there anything I can do for her?

Ans.: There is a spinal disease and very probably the joints of the hind extremities have taken on a form of rheumatic arthritis. It is a very serious and dangerous disease as you cannot give the treatment she should have without injuring the little pigs. Give a dram of salicilate of soda three time a day and apply a mustard paste on the loins once a day for three days. You may wash the legs in mustard water once a day for a week. This may relieve her. Feed laxative food.

Stiffened Hog.

About a month ago one of my hogs became stiffened. He seemed to get worse and after a while would not come to the trough with the others. I put him by himself about two weeks ago but now he lies nearly all the time. Have to move him sometimes to get him to eat. He is about eight months old.

Ans.: Don't waste any time or money on the hog. If you do not destroy him now, he will certainly die in spite of what you do for him. It is discouraging but true.

Stiff In Hind Quarters.

I have a sow that had pigs last summer. When they were about six weeks old she got stiff in her hind quarters and is not able to use her hind legs. When I raise her up her hind legs are crossed. I feed her corn and have her out on grass. What can I do for her?

Ans.: There is no use treating the case as she will never recover. If she is in good flesh you had better butcher her as she will be liable to get worse instead of better. There is an affection of the spine.

Stomach Trouble.

My hogs are not doing well. Some of them turn their noses up continually in breathing, and blow all the time.

Ans.: It is very difficult to state the cause of the trouble without seeing them. You had better change your feed and give quite a considerable amount of roots. Feed them mixed either with ground feed or shorts, in moderate quantities; feed the roots cooked. There is no medicine that could be recommended for this trouble.

Sour Stomach.

I have a number of hogs that seem to be troubled with sour stomach. They keep gagging all the time, and seem to be full of gas. What shall I do for them?

Ans.: See that they are provided with a box of salt and wood ashes, 2 quarts of salt to a bushel of wood ashes is a proper combination. Give hogs all the wood ashes they will eat, and in the absence of this, charcoal or even soft coal will answer. Hogs that have not been used to salt should be given it sparingly until they become used to it.

Sun Scald.

My pigs are running on a rape and oats pasture. Their ears get sore and they have sores along their backs also. It seems to be from the heat of the sun, and a shower of rain makes them itch terribly.

Ans.: The trouble is probably caused by their running in tall rape and oats while both are wet. Under such conditions the sun is likely to produce the result complained of. It is possible, even probable that white pigs are more liable to sun scald than black hogs.

Sunstroke.

I have a young sow that got very fat after her pigs were weaned. During the last spell of hot weather she seemed to have a touch of sunstroke. I made her a movable pen and put it where she could have shade all day and fed her a thin slop of oats. She seems to be all right now except that she is unable to use her front legs but walks around on her knees. She lies down most of the time. What can I do for her?

Ans.: These cases are very serious and the majority never regain their normal condition. There is a softening of a small portion of the brain due to a congestive condition of the blood vessels at the time of her acute attack. You may try a half teaspoonful of iodide of potassium in her feed twice a day for a few weeks and if you do not get good results you may as well stop the treatment. If you can keep her in a cool place it may have a beneficial effect on the case. Keep the bowels open with laxative food.

Throat Trouble.

I have a boar pig about five months old that has been quite fat and was doing well until about two weeks ago when I noticed his wind getting bad. He breathes quite loud and has a cough. He has a swelling in his throat and is getting thin. It seems to hurt him to eat. I have been feeding corn. Is this trouble contagious and what will help him?

Ans.: If he is not a very valuable pig you had better destroy him. It is the safer way, as the disease may prove to be contagious. If you keep the pig he should be removed from the healthy pigs

at once. Bathe the throat with hot water three or four times a day. Mix a teaspoonful of chloride of potassium in the water he drinks. If any abscess forms it should be operated upon as soon as it is ready.

Thumps.

What is the matter with my six-weeks-old pigs? They are taken with coughing by spells and are soon unable to breathe, and soon die. Is it thumps?

Ans.: Yes, it is thumps. Prevention is cheaper than drugs and more satisfactory. Thumps seldom occur except in the winter and early spring months, when sow and pigs are confined to pens. As a rule the sow is a great milker. Here, then, some judgment is needed, as long as the sow and the pigs are not able to take outdoor exercise. Feed her more judiciously and overcome all weakness of the heart. As soon as the pigs are able to follow the sow outdoors, turn her out each sunny day, the first day for an hour, the next day longer, until they are accustomed to take regular exercise for several hours each day, out of doors. This will prevent thumps.

Thumps In Pigs.

What is the best treatment for thumps in pigs and is there any successful cure?

Ans.: After pigs once get the thumps there is little chance of recovery. This trouble comes on gradually. One may feed his pigs in the morning and they may appear to be in perfect health. At noon he may find that one or more lies still in their bed while the others rush up to the trough, or perhaps they will get up and take a few steps in that direction only to turn around and lie down again. When the trouble has advanced this far there is small chance of recovery. The best way to treat this disease is to prevent it, which can only be done by foreing the pigs to take exercise when they are very young. Pigs that are confined to the narrow limits of the pen become sluggish and large chunks of fat form around the heart. This injures its functions, and the lungs in trying to repair the damage, cause the rapid heaving of the sides commonly known as thumps. The pigs should be gotten out on the ground as quickly as possible where they can have plenty of room to run about for exercise. If any are noticed to be sluggish or indifferent as to whether they leave their bed with the others, force them out and fasten the hog house door to prevent them from returning to their bed. Exercise, good feeding and sunlight are the only remedies for thumps.

The sows should have very little corn during the period of nursing, and while the pigs are making their growth they should be given food containing a large percentage of protein, such as green clover, oats or milk and just enough corn to keep them growing nicely without getting too fat. Sunlight is also necessary for the little fellows' development and if they can't get it in their pens they should be turned out and the door fastened for a few hours every day.

Tuberculosis.

If hogs are confined in pens or yards where tuberculous hogs have died some time ago, is there danger of their contracting the disease? Are hogs running with tuberculous cattle subject to the disease?

Ans.: Hogs will certainly take tuberculosis if the disease existed in the former herd. This is especially true if no rain fell in the meanwhile. Do not put hogs in pens or lots where any disease existed in a former herd until a winter has passed and you have thoroughly disinfected their quarters. Hogs are very liable to contract tuberculosis if allowed to run with cattle that are badly affected with the disease.

May be Tuberculosis.

My hogs have contracted a cough that will not leave them. It seems to be catching as many of the young pigs have it also.

Ans.: You probably have tuberculosis among your hogs. If so it will be liable to affect the whole herd. You might try five drops of creosote to each hog three times a day, and continue the same for two or three weeks. If you see no good results from this treatment you had better dispose of the hogs at once. Fumigate the premises and disinfect thoroughly before putting any other hogs in their place.

Tumors on Pigs.

A week or two after I castrated my boar pigs I noticed that bunches formed on the cords of some of them. What is the cause and what treatment should I use?

Ans.: The cause is generally the result of infectioin from dirty instruments or hands during the operation. The trouble may also be caused by leaving the cords too long, thus increasing the liability of their becoming infected. These tumors have been known to grow until they were almost the size of a man's head. In treating this trouble cut down on the tumors the same as in a case of castration. Then separate the skin from the tumor and follow the cord up as high as possible with the hand and cut off. The wound must be thoroughly disinfected. Any of the common disinfectants will do, but if there are none on hand a teaspoonful of carbolic acid in a quart of water should be used every day until the wound is healed.

Great care should be taken with regard to cleanliness about the pens after the operation.

Weak Pigs.

I have been feeding some two-months-old pigs on bran, shorts and milk, but they are weak and can hardly walk.

Ans.: Give the little fellows a physic—a tablespoonful of castor oil and follow it up with ten drops of tincture of nux vomica three times a day. Change the feed. Stop giving shorts and milk for a few days. You may also apply a light mustard blister along the spine over the loins.

Weak Pigs.

What makes my pigs get weak in their limbs?

Ans.: Too much fattening food, such as corn, and not enough of that feed that is rich in bone and muscle material. If they are not confined and have clover pasture with a feed of wheat middlings every day you will not meet such trouble.

Worms in Hogs.

What causes worms in hogs, and how can I get rid of them?

Ans.: There are several kinds of worms which infest the intestines of hogs and pigs, but all have, in general, the same life history. First comes the egg, then one or more immature stages, and finally, the mature worm, which, in turn, furnishes another crop of eggs. Some of these parasites pass their whole life in other parts, or in mud and stagnant water. It is essential, when once we know of the existence of worms in our herds, to use the utmost care in removing all excrement, manure and filth, about pens and yards, and disinfect them with lime, so as not to have a recurrence of the same trouble, year after year. If salt and ashes are kept before hogs, and they are fed on healthy food that has not undergone fermentation, the trouble seldom occurs. But, if hogs are wormy, give them a dose of Santonine, from three to ten grains, depending upon the size of the hog or pig. Santonine is soluble in boiling water or alcohol. Give it to them in a light feed when the bowels are as empty as possible, twice the first day and repeat on successive days. When the pig is getting too much he shows it by tumbling movements, and if the dose is too large there are actual convulsions or colic. Follow this with a purgative of either calomel or linseed oil. For the common worm, which is the size of a goose quill and four or five inches long, boil down a strong decoction of tobacco, and give to each one hundred pound hog a tablespoonful in some swill, a few days in succession.

Worms in Hogs.

Some of my pigs are coughing and sneezing. They get poor and finally die. They seem to be wormy, for after death the worms come up into their throat and mouth. I have an idea that the worms work up into their throats and choke the pigs to death. They are fed corn, with water and a little milk to drink.

Ans.: You did not state the size or the appearance of the worms. They probably came from the stomach, though not until after death. It is not probable that they choked the hogs. The symptoms given are more like lung fever than anything else. Give the sound ones one-third of a teaspoonful of sulphate of copper in feed twice a day for a week. They should then have an ounce of castor oil to a hundred pound hog at the end of the above period. Keep the sound ones in a warm, dry, well ventilated pen, and change bedding very often. If your hogs continue to die, you had better have the state send their veterinary inspector at once.

Pigs Have Worms.

What shall I give my pigs to prevent them from having worms? I killed a ten-months-old pig and found four white worms in the small intestines; the worms were all together; they were about ten or eleven inches long and about as large around as a slate pencil.

Ans.: In dealing with such an affection preventive measures are better than those of a remedial nature. A good mixture to give them is made up as follows: Mix six bushels of corn cob charcoal that has been well crushed, or three bushels of common charcoal, with one bushel of coal ashes, eight pounds of salt and two quarts of air-slaked lime. Dissolve 1-¼ pounds of copperas in hot water. Sprinkle it over the mass and mix thoroughly. Put into self-feeding boxes and let the pigs partake of the same at will.

Probably Stomach Worms.

My May and June pigs have been coughing ever since I weaned them. I gave them shorts and skim milk for a while, and now I feed them a little new corn. They always ate well until tonight. One of them refuses to eat now. They cough mostly after eating.

Ans.: The cough may be due to catching cold, but it is more probable that it is from stomach derangement. Stop feeding the shorts entirely. Green stuff is very good, but they should be allowed some nourishing diet such as crushed corn or oats, scalded and fed in conjunction with other and light foods. Keep warm and dry. Medicines are of no avail in these cases as it is very unsatisfactory to be doping little pigs.

Worms.

I bought a little pig and see that it now has worms. What can I do for it?

Ans.: Give the little pig plenty of ashes, charcoal and good, rich, nutritious food. In a short time he will not be bothered with worms.

Worms.

Please tell me what will free hogs from worms?

Ans.: Give the hogs a teaspoonful each of the following on their feed twice a day: Sulphate of copper, one pound, powdered fine, hardwood ashes, five pounds. Mix thoroughly and give as directed.

Send for the State Veterinarian.

I purchased a Poland-China boar last fall that was not related to my hogs in any way. He seemed to be a vigorous animal and perfectly healthy. After I had used him for several of my sows he suddenly became very sick. He was all right at night but the next morning he refused to eat or drink and his breath came very hard and short. He died two or three days later. His pigs seemed strong and healthy until they weighed from sixty to 100 pounds when occasionally one will begin to thump and breathe hard and short. They do not seem to have any appetite but continue in this dumpy state for two or three weeks and then die. I have lost six or seven in this way. Did they inherit the trouble from the sire and is there anything I can do to prevent the sickness? With the exception of the sick pigs they all seem healthy. I thought the trouble might be worms and gave them copperas but that doesn't prevent the disease. The pigs have run in a good pasture and have been well fed on corn, shorts and swill. I turned them into a corn field where I planted rape. What is the trouble?

Ans.: You had better call in a competent veterinarian to hold a post-mortem examination on the next pig that dies or notify Dr. Morton S. Whitcomb, Secretary of the Live Stock Sanitary Board, St. Paul, Minnesota. It looks very much as if the hogs were affected with tuberculosis and if they are you do not want to breed any of the diseased ones.

Serious Pig Trouble.

We have some young pigs from one to four weeks old that are troubled with sores on inside and outside of jaws, on the nose and lower joints of the feet. The sores first appear in the lower jaw in the shape of small holes which contain proud flesh. These holes gradually grow larger until at last they get about as large as a 25 cent piece. The proud flesh or matter in the center of sores hardens up leaving a little space open at the outer edges. The sores become quite deep.

Ans.: It is difficult to state definitely the trouble with your little pigs or what the cause may have been. It would be well to secure a qualified veterinarian to inspect your hogs. In the meantime, use some good disinfectant freely about the pens and yards. Have the chairman of your local board of health send for the state veterinarian to look at your pigs. This will be done upon his request and without expense to you.

Consult a Veterinarian.

We have a lot of young pigs about two weeks old. Their teeth rot off and their mouth all matters. Holes rot through the mouth, and the pigs die.

Ans.: It would be impossible to tell the trouble without seeing the pigs. By all means consult a veterinary surgeon and have him make a thorough investigation into the cause of the disease.

Contagious Disease.

My pigs get sore eyes and swell up, especially about the head and neck. They breathe hard and soon die.

Ans.: Have your local board of health send for the state or district veterinarian at once. No doubt you have a serious contagious disease in your neighborhood, and should take measures to stamp it out immediately.

Breeds Compared.

The Berkshire.

I have heard a great deal about Berkshire hogs but know little about their history, their possibilities or general characteristics. Please tell me all you can about these hogs, as from what I can find out they come nearer to being what I want than any of the other breeds.

Ans.: As the name indicates, this breed of swine originally came from the county or shire of Berks, England. The original Berkshire, unlike those of today, were large, rawboned, coarse hogs, with drooping ears; in color they were black and white, and even occasional red or sandy spots would crop out.

The improvement of this breed began about 1780 when they were crossed with the Chinese hog; but not until about 1820 were they brought to any degree of perfection. It is stated by some that the Neapolitan hog was the main source of Berkshire improvement. This, however, is firmly denied by others, and there is little authority for the statement that the Neapolitan was used at all in this connection.

One of the first importations to the United States was made by John Brentnall, of New Jersey, about 1823. Some years later an English farmer living near Albany, N. Y., brought over a few head. Since that time great numbers have been im-

ported, and the improvement made by the American breeders has been so marked as to cause competent judges to decide in favor of the American bred hogs. In "The Book of the Pig," Professor James Long, speaking of the breed for exhibition, says, "In America the Berkshire pig is much more extensively bred than with us, and there is in that country not only a very large number of breeders of pigs of an exhibition type but there is a Berkshire Pig Association, which is supported by a large number of members, although English breeders to whom the Americans originally came for the foundations of their herds have hitherto lacked sufficient spirit and energy to carry anything of the kind to a successful issue." Although the Berkshire is an English breed of swine, the standard of American breeders is usually accepted in preference to that of the English. Among all swine, the Berkshire has continued to hold its place in high esteem, and is today, as has been the case for many years, the standard for comparison for other breeds.

In characteristics, the Berkshire is possessed of muscular power and heavy bone, and is more of a bacon than a lard hog. If desired they may be fattened for market at any age and when continuously and properly fed, attain great size and weight. The average live weight of the well kept Berkshire shoats placed on the market at nine to twelve months old should be 250 to 300 pounds. When mature, they should weigh from 500 to 600 pounds. These weights are not at all uncommon. When used in crossing or grading up common stock, Berkshire boars transmit all the valuable qualities of their breed with considerable certainty.

Poland-Chinas.

We have several registered Poland-China hogs. Some of them have red hair on the ends of their ears, also on their backs. Is this a sign that they have any Red Jersey blood in them?

Ans.: It is impossible to say definitely whether your Poland-China hogs are mixed with Duroc-Jersey blood. The color accepted by Poland-China breeders is white and black, but as recently as 1816 the "Big Chinas," as they were then called, were large white hogs with sandy spots, so that in accordance with the law of atavism your hogs may be pure-bred and yet have a few red or sandy bristles on them. At the same time, however, it looks as though there was an admixture of either Duroc-Jersey or Tamworth in your hogs, somewhere a few generations back.

Poland-Chinas vs. Duroc-Jerseys.

Which kind of hogs is the best to breed, the Duroc-Jerseys or the Poland-Chinas?

Ans.: There is probably but little difference now between the two breeds. They are becoming so nearly alike in form that if the Poland-Chinas were red they would pass for Duroc-Jerseys. There is probably no material difference between the feeding properties of these pigs. Years ago the Durocs were longer in limb and better rustlers than the Poland-Chinas, while the latter fed more easily. But it would not be safe to say that the same difference exists now.

Duroc-Jersey Swine.

I am an Eastern man and intend to move to Iowa next spring. I would like to know if the Duroc-Jerseys are popular in that section of the country. Are they vigorous and rangy and do they produce as strong, healthy litters as in former years?

Ans.: The Duroc-Jersey of today is an animal that stands high in favor with many western growers. When first brought west into the corn belt, Duroc-Jerseys commended themselves to swine growers largely because of their good rustling qualities. In those days much of the corn was harvested by the swine where it grew. Duroc-Jerseys are active and vigorous, and give a good account of themselves while thus harvesting the corn. The active powers which made them good rustlers also had a favorable influence on the breeding qualities; hence they were prolific also. Gradually, however, modifications have been going on. The leg and body have grown shorter and at the same time more massive. This change of form has brought with it a more sluggish disposition which the breeders will do well to cultivate. It is possible to make the legs so short and the body so dumpy and compact as to interfere seriously with the breeding qualities and also hurt their reputation. While it is not desirable to change the breed so as to revert to the rangy type, they ought to have enough length of body and limb to keep them active and enable them to rear healthy and strong litters.

Duroc-Jerseys.

Is the Duroc-Jersey a profitable breed of hog?

Ans.: The Duroc-Jersey is the same as the Jersey Red and is both popular and profitable. This breed is noted for producing large litters and they are good rustlers.

Duroc-Jerseys.

Is there any difference between Duroc-Jerseys and Jersey Reds, and if so which are better and why?

Ans.: There is no difference between the Duroc-Jerseys and Jersey Reds. Both names are applied indiscriminately to this breed.

Duroc-Jerseys vs. Chester Whites.

Is the Duroc-Jersey an all around better pig for the farmer than the Chester White? If so, why?

Ans.: It would scarcely be correct to say that one of these breeds has any marked superiority over the other, so far as economy in production is concerned. Which of these a farmer should grow should be determined by his tastes and also by the market which he will try to meet. Both are excellent breeds when rightly chosen and grown; but the Chester White is a larger breed than the Duroc-Jersey, whereas the latter, being smaller, is probably rather the more active of the two. In prolificacy it would scarcely be safe to say that one breed has an advantage over the other.

O. I. C. Swine.

I would like to know what the O. I. C. swine are.

Ans.: The O. I. C. swine are the Ohio Improved Chester swine. They are a somewhat carefully bred variety of the Chester White breed. Whether they are superior to the Chester White, is, of course, a matter of opinion.

Improved Chester Whites.

I would like a description of the improved Chester White swine. Are they a large or small breed, fine or coarse? What is the difference between them and the Improved Yorkshires?

Ans.: Improved Chester White swine are a large breed of white hogs, as the name indicates. As now bred they are fairly refined and are stronger in limb and bone than the average Poland-China. Compared with large Yorkshires, they are broader in the back and, in fact, broader everywhere, but have not so much depth of side in proportion to the width. They incline to the fat hog when finished, while the Improved Yorkshire inclines to the bacon type. Both classes are reasonably prolific, but in this the advantage lies with the Yorkshires.

O. I. C. and Chester White Swine.

What is the difference between the O. I. C. and the hog commonly called Chester-White? Is the former a better hog, and if so, in what respects? 2. Is it true that the O. I. C.'s and Chester Whites do not mature as early as Poland-Chinas, and that they are harder to fatten? My own experience would lead me to believe that while Chester Whites may not always look as smooth as Poland-Chinas, they make more growth and more pounds of live weight for what they consume. Am I right?

Ans.: The difference between the Chester White swine and the O. I. C. swine is, that the latter is an improvement on the former. That is, they are a little more refined, will breed better and are truer to type. 2. There is a little truth in the idea that Chester White swine do not mature quite as quickly as Poland-Chinas, but much depends upon the way in which they have been bred during recent generations. On the whole, the Poland-Chinas probably mature a little earlier, and the Chester Whites grow better for a period somewhat longer. On the average, Poland-Chinas will make more growth than Chester Whites up to a limited age, but the reverse will be true when that age, say four or five months, is past.

The Essex.

Please tell me something about the Essex hog. I want to know something about their history and how they compare with the Durocs, Poland-Chinas and Berkshires. Would this breed be profitable in North Dakota and Northern Minnesota?

Ans.: This breed takes its name from the county or shire of Essex, England, where it originated. It is valued more for its quiet disposition, rapid growth when young and early maturity than for its size or ability to produce a large amount of meat. The old Essex hogs were large, gaunt and "slab sided" with no particular color. This breed has become well known in America particularly in the south where they are being pushed with great vigor. Wherever there is a local demand for well matured hogs of small or medium size, or for pigs of which one or two are to be kept in a small pen and fed principally on slops from the house and the refuse from the garden, the Essex is a valuable animal. The modern American bred Essex is a medium sized hog weighing, when mature, something like 250 to 400 pounds. They have fine heads, firm boned legs, close "chunked" bodies and are good rangers. They fatten easily and are seldom troubled with mange or sun scald. It is a question as to whether the Essex can ever compare favorably with the Duroc-Jersey, Poland-China or Berkshire in the western states, as long as corn remains the cheapest, or at least the principal swine food. In the South where cotton is still king, the Essex has no equal. The tendency on the part of this breed to fatten easily has been raised as an objection against it, but it would be hard to find the breeder who desires the acquaintance of a large number of lean hogs. He is generally looking for animals that fatten quickly, giving the greatest possible returns on the investment. The Essex swine have a great future. They would be found profitable in North Dakota and Northern Minnesota and Wisconsin where corn as yet does not comprise most of the swine

ration. There are some excellent types of this breed to be found in Minnesota.

Victoria Swine.

Do Victoria swine raise large litters and are they hard breeders? Are they getting to be heavy-weights? Do the sows take good care of their litters?

Ans.: There are a few Victoria breeders in the northwest, although it is hard to explain why these hogs are not as popular as in some sections of the east and southeast. These animals are white in color and range from medium to large, weighing when twelve months old from 300 to 400 pounds. Victoria breeders claim them to be an economical breed for pork production. The sows generally produce large litters and are good mothers. It is claimed for them that they are not susceptible to mange, scruff, sun scald or other similar troubles which have made hog breeders fight shy of white hogs in general.

Small Yorkshires.

I have just ordered two small Yorkshires. How are they as porkers? Did I make as good a purchase for fat producing and for market as if I had chosen the large Yorkshires? Also for quick maturity?

Ans.: For quick maturity and for producing fat pigs for market that may be sold from 5 to 6 months, there is probably no breed superior to the small Yorkshires. The large Yorkshires are a bacon breed and should be kept 7 or 8 months before being slaughtered.

Large Yorkshires.

Please tell me something about the characteristics of the large Yorkshires and whether they are popular for crossing on Poland-Chinas and Berkshires. How are they for producing bacon? Are they good feeders?

Ans.: With regard to the most important characteristics of the large Yorkshires, these hogs should always be white all over the body, although bluish or blackish spots which occasionally appear on the skin do not necessarily disqualify them for registration. The head is of medium length with but little upward curve. Broad, strong under jaws and short heads are prominent features. The ears droop forward and should be of medium size, heavy but never loppy. The back is broad like that of a Poland-China and should be both lengthy and deep. The hams of the large Yorkshire are never extremely fat or heavy but should be of good thickness and size. Sows of this breed have been known to weigh 1203 pounds while they frequently reach 1000 pounds. Many breeders claim that large Yorkshire boars crossed with either Berkshire or Poland-China sows will produce excellent feeders, the combination giving pigs that grow rapidly, feed well and make a fine smooth finish with an excellent quality of meat. As a bacon producer the Yorkshire is noted. The celebrated Danish and Irish bacon is produced very largely from this breed. Some objection is raised by feeders of other breeds that the large Yorkshires do not eat the ordinary foods that are relished by Poland-Chinas or Chester Whites, but experiments along this line prove the Yorkshire to be an excellent feeder, producing prime bacon and lots of it.

About Breeds.

Is there any difference in the breeds of Jersey Red, Tamworth and Duroc hogs, or are they all one breed?

Ans.: The Tamworth and Jersey Red breeds of swine are essentially different breeds. The Tamworths are an English breed of the most pronounced bacon type. They are long in body, nose and neck and are inclined to length of limb. The Jersey Reds or Duroc-Jerseys are an American breed, and except the color are much like the Poland-Chinas. They are thought by some to be a little stronger in the limb than the Poland-Chinas. The only resemblance between the Tamworth and Duroc-Jerseys is the color.

Breeds of Swine Compared.

Are Berkshires and Duroc-Jerseys as easy keepers as the Poland-Chinas, and which of the three breeds can be put on the market the quickest?

Ans.: It would not be safe to claim that any one of the three breeds of pigs named has any advantage over the others in easy keeping qualities or in early maturity. Experiments that have been conducted with reference to this question have shown that there is more difference in the individuality of the animals themselves than in the breeds.

Breeds Compared.

Are Duroc-Jerseys as good hogs to raise as Poland-Chinas or Chester Whites? Are they prolific and are they good mothers?

Ans.: Duroc-Jerseys are giving excellent satisfaction. They, as a breed, do not mature as early as the Poland-Chinas, but are usually considered as good mothers and more prolific. As to size of litters and time of maturing they are about on a par with Chester Whites. By similar methods of feeding and breeding the three above mentioned breeds are coming nearer together in general characteristics.

Are Poland-Chinas Prolific?

In an exchange I notice a complaint of a Poland-China breeder to the effect that his sows are lacking in prolificacy, having produced only four pigs to the litter. What is the cause?

Ans.: When such results take place the management is in some way at fault. By proper selection and feeding Poland-Chinas will produce freely enough. In making selection, sows should be chosen from large litters. This plan should also be followed in choosing males, although with sows such selection is of the first importance. Other precautions are necessary but the course of action recommended will in itself go a long way toward increasing the prolificacy of the dams.

Finishing Age.

At what age is it best to finish the Poland-China for market?

Ans.: In growing Poland-Chinas for market, have them ready to go at about six or seven months old, weighing from 200 to 225 pounds. When raising a large number of hogs for pork, it might pay you to raise two crops a year.

Best Breed of Hogs.

Which is the best kind of pure-bred pigs to buy? Is the Small Yorkshire a good kind? Can as much money be made with them as with the Poland-Chinas or Large Yorkshires? There don't seem to be many farmers raising the Small Yorkshires. What is the reason? Don't they grow as fast as other breeds? Is the Chester White the largest breed there is?

Ans.: The best breed of swine will always be a matter of opinion. It is affected considerably by the local conditions of the market. Small Yorkshires are suitable pigs for any one having a market for young animals that will grow quickly and can be turned off at any age under six months. The Large Yorkshires do better to be kept until seven or eight months old. They are bacon hogs and wherever there is a market for the bacon hog it will be profitable to raise them. They produce large litters and are vigorous and healthy. The Poland-Chinas are also a good breed, one of the best where they have not been allowed to become too small in bone or too short in body and where their breeding qualities have been kept up in good shape. The Berkshires are becoming more popular all the time. It would not be correct to say that any one breed will positively prove most profitable under all conditions. The Chester Whites are about the largest of the breeds but in some instances the Large Yorkshires are larger.

Best Hog for Market.

Which is the most profitable for the farmer to feed for market, the full-blood or the cross-bred hog?

Ans.: Do not pay an extravagant price for a full blood sow where the object is to raise pigs for pork. However, if you can buy at about pork prices full-bloods that have not been bred too fine or overfed on fattening foods, and that have not been overconfined, it would pay to get them. Buy a pure-bred boar no matter what your females may be.

The Best Hog.

What is the best hog to grow?

Ans.: The best hog for the farmer to grow is the breed that he is in love with, as that is the pig he will give the best care and will make him the most money. There is no "best hog." The best hogs are those that get the best attention.

Selecting a Breed.

I am going into the hog business. Durocs seem to be in favor here but I prefer the Berkshire. Shall I cater to the trade or raise what I prefer myself?

Ans.: The man who is raising hogs to be sold for breeders cannot be too careful to grow only such animals as come nearest his ideal type and breed. Don't try to raise something you do not like yourself.

Color in the Swine.

I have a pure-bred Poland-China boar and I wish to know if he is bred to some scrub sows mostly white, if the pigs will be of the color of the sire or marked like the sows?

Ans.: If the sows are of mixed breeding, which in all probability they are, the preponderance of color in the young pigs will be black; but in all probability they will be spotted.

The Pork Breeds.

Can any particular breed be recommended as being profitable?

Ans.: No, but for anybody raising hogs for pork he shouldn't go outside of the Poland-China, Jersey-Reds, Berkshire or Chester Whites; those are the best four pork breeds.

Bacon vs. Pork Hogs.

Which of the two classes brings the best price on the market, bacon or pork hogs?

Ans.: According to reports, the bacon hog appears to be selling for the most money, that is, the Irish and Danish bacon.

Lard or Bacon Type.

Is the Duroc-Jersey considered a lard or bacon hog?

Ans.: Duroc-Jerseys are classed as a lard type, although environment has a great deal to do with it. In the corn states the Duroc-Jersey is pronouncedly of the lard order but if taken up into the wheat belt of northern Minnesota or the Dakotas and fed largely on rye and barley, it is likely in time to incline somewhat toward the bacon type.

Crossing Swine.

Of the two breeds of swine, Large Im-

proved Yorkshires and Tamworths, which is the best to cross with Berkshires? In mating for a cross, which sex should the Berkshire be? In what respect have the Yorkshires and Tamworths been improved, and which of these two breeds attains greatest weight at six months of age, and also at maturity? Which is the easier keeper?

Ans.: There is very little real choice between the Yorkshire cross upon the Berkshire and the Tamworth cross upon the same. The progeny from the Yorkshire would be white and from the Tamworth cross red and black intermixed. Breeders generally prefer using Berkshire females for the reason that they are far more numerous than the females of either of the other two breeds, at least in this country. The Yorkshires and Tamworths have been improved by more than a century of careful breeding. The Tamworths are probably the largest breed of swine in America at this time. There is but little difference, if any, in the average weight of the pigs at 6 months of age. At maturity, possibly the Yorkshire is the larger, but this also may be disputed. There is practically no difference in their keeping qualities.

Effects of Crossing.

Will crossing two breeds have much to do with producing uneven litters? 2. In raising hogs to fatten for market, would it be best to breed in line or cross? 3. How would a Poland-China on Chester White be for a cross for this purpose?

Ans.: Whether cross-breeding produces uneven litters or not, depends upon the affinity or lack of affinity, in the breeds crossed. They cannot be determined until the experiment has been made. 2. In raising hogs to fatten for market a judicious cross generally brings more rugged animals and somewhat more growth than breeding in line, but an injudicious cross will have the opposite effect. 3. Poland-Chinas on Chester Whites usually give satisfaction. The same is true of the opposite mode of crossing.

Miscellaneous.

Castrating Boar Pigs.

I have six sows that farrowed last week. Two-thirds of the pigs are boars. Shall I castrate them, and if so when is the best time to do it?

Ans.: Castrate all boar pigs not needed for breeding. This can be done any time after the pigs are a month old, and if done at from four to six weeks they will have fully recovered before they are weaned. If not done then it is better to wait until a month after weaning, so that they will have become thoroughly accustomed to eating solid food.

Castrating Pigs.

Is it dangerous to castrate pigs in cold weather?

Ans.: If the pigs have good, warm, clean sleeping quarters, they can be castrated in cold weather, but fall or spring weather is preferable.

Castrating November Pigs.

When should I castrate November pigs?

Ans.: While they are yet nursing the dam. As soon as you can distinctly get hold of the testicles. The earlier the better.

Castrating Old Boars.

I have a fine boar but he is too old for service and I have been unable to find a purchaser. Will it be safe to castrate him and what is the best method of conducting such an operation?

Ans.: Draw up one hind leg and fasten it securely to a post. Fasten another rope around the upper jaw, back of the tusks, draw it tightly and fasten it to another post. An animal in this position can offer very little resistance. In castrating, the cuts should be low down and no longer than necessary. The cut should extend low enough, however, so that there will be no pocket left in the sack to hold pus which forms during the healing process. An operation of this sort should not be conducted on boars that are very fat or during the hot weather as the risk is then much greater. If they are castrated early in spring and kept on grass through the summer, they will fatten up readily and in the fall their flesh will be very little more rank than that of other hogs. Emasculated boars are apt to be cross and quarrelsome if kept with other hogs and on account of their tusks to do great damage. It is therefore advisable to fatten stag hogs by themselves.

Trouble With Pigs After Castrating.

Last spring we had some pigs castrated. A long opening was made and the cords well drawn. The pigs did well at first, but later a large growth formed and now it seems hard. Some break open but do not suppurate. The season has been very wet and muddy.

Ans.: It is probable that your hogs are suffering from scirrhus cord. It is hard to understand how you could have any other trouble with the pigs if you did the operation neatly and were careful to have your hands and knife clean. It will not pay you to go to much expense with the ani-

mals. Fatten them for the butcher and get them off as quickly as possible.

Trouble After Castration.

What is the matter with one of my hogs? About five months after he was altered a large swelling or boil gathered at that place. It grew to be as large as a three-quart pail, and then broke. In a few weeks it gathered again and broke and has done the same several times. Each time it was larger than before. It does not seem to affect his health. He eats and grows well. Is there any cure?

Ans.: The only relief for your hog is to have an operation performed and remove the cause. The operation should be performed before the weather gets too warm. Operations of this sort are so rarely successful, however, that it will probably pay you to fatten the animal and sell it to your butcher as quickly as possible.

Trouble With Castrated Pigs.

My renter has suffered this year from the male pigs not healing well after castration. They swell up behind as though ruptured. Four or five out of twenty are troubled this way. The same man performed the operation last year but had no trouble.

Ans.: The trouble is usually due to scirrhus cord, from not being careful in the operation, leaving too long a cord or not being clean with hands or instruments. They are not ruptured or you would have seen evidence of it at the time of operation. Do not allow the pigs to crowd each other through doorways in going to the trough, or to pile up too much at night.

Quarrelsome Hogs.

I have been very much troubled, every time I have a lot of hogs to be fed, with their quarreling, and often find it necessary to go into the pen and separate the animals, but they generally begin again as soon as I leave them. What can be done?

Ans.: Many swine breeders claim that this restlessness is due to a feverish condition and that they will bite each other for want of something to cool their fever. Stone coal has been given to such hogs with a claim that it has effected a complete cure. It will at least be worth your time to give it a fair trial.

To Prevent Sows From Fighting.

What can I do to get two sows used to each other so that I can keep them together? They fight all the time and I want to get them so I can put them in the same pen where they can sleep and eat together.

Ans.: Sows can sometimes be quieted by placing a boar in with them as he often acts as peace-maker when two sows get to fighting.

High Tempers in Pigs.

Why do pigs show high tempers and bite each other?

Ans.: It is pretty hard to tell, but it is often necessary to remove one of the pigs, or take nippers and pull the baby teeth or tusks. This usually brings peace to the family.

Hogs Eat Each Other.

My hogs were on clover last fall. I brought them in and shut them in the pen. They all jump on one and kill it. They do not eat the carcass but seem satisfied as soon as one is dead. I feed a variety. What makes them do it?

Ans.: Turn a boar among them. He might stop their fighting. There is nothing else to do unless you watch, find which are the offenders and cut them out of the herd.

Sows Eating Their Own Pigs.

How can I prevent my sows from eating their own pigs at farrowing time?

Ans.: If this unnatural appetite is not caused by a diseased condition of the uterus, which is seldom the case, it is generally caused by the confinement of the sow, with no exercise, and being fed on a food that is heating and constipating in its nature. Often the withholding of salt for a long period causes derangement of the bowels and liver. It will seldom occur if she has been fed on a mixed food with an addition of roots or oil meal. However, if it should occur, take all the pigs away at once, and when she lies down pour into the ear a mixture of ten to twenty grains of spirits of camphor, with one to three of tincture of opium. The sow will lie down on the side the application is made and will remain so for hours, and will lose her irritability in regard to the pigs. Of course, let them nurse while she is in this state. Sometimes it is caused by the pigs biting the sow. If so, remove with a pair of nippers, the upper and lower tusks of them all.

Sow Eats Pigs.

I have a sow that has commenced eating her pigs. They are about three weeks old. How can I prevent it?

Ans.: Remove the little pigs from the sow as soon as they are done sucking. Feed good rich food and a little sprinkle of salt occasionally. Do not breed this sow again as she is liable to commit the same offense.

Sows Eating Young.

Have been troubled with sows eating their young. Tried giving them salt pork, but it did no good.

Ans.: Give them a dose of epsom salts in feed every five or six days for a time before farrowing, and feed raw potatoes freely. This has been suggested by an old swine breeder.

Hogs Eating Their Young.

My hogs eat their young after they are

five weeks old. How can I prevent it?

Ans.: It is generally some defect in the food which leads sows to eat their own pigs. They do not get enough nitrogenenous, or flesh-forming food. Change the ration and watch them carefully. If the sows still continue to eat their young do not retain them for breeders, but fatten and sell them off as quickly as possible.

To Prevent a Sow From Eating Her Pigs.

How can I prevent a sow eating her pigs?

Ans.: Feed her largely on food that tends to promote growth and not fat. It is the corn fed sow that eats up her pigs, and not the one that has the run of the barnyard and that is fed largely on slops.

Hogs Eat Chickens.

Is there anything to feed hogs to keep them from eating chickens? I have a pen of fattening hogs and every time a hen gets in the pen the hogs catch and eat it.

Ans.: It looks as though your hogs are getting too much corn, and that they eat the chickens to satisfy a craving for food that is not so rich. You had better feed less corn and try giving them some oats, bran or middlings. You will then have a more balanced ration, and if your hogs have not acquired a fondness for chicken, you may save the others. If possible, you had better cover the yards over with chicken wire. Give the hogs charcoal and salt and all the clover pasture you can.

Hogs Eating Hens.

In the fall of the year I always lose a number of hens that fly over into the hog pen while the hogs are eating. Why is it that at this time hogs will kill and eat poultry?

Ans.: There is evidently something wrong with the feed they are getting that causes this unnatural desire. It is generally due, however, to a lack of variety, and is most noticeable when they are on a strictly corn diet. A little middlings and milk or water, or an occasional feed of barley and rye serve well to overcome this difficulty and it is also well to have before them constantly a little salt and charcoal or wood ashes where they can get it at all times.

Expensive Pens.

My neighbor has been in the hog business quite a number of years and is now putting up some very expensive pens. I am only a beginner as compared with his experience with swine, and want to know if it would be advisable to start with expensive pens and fewer hogs or more hogs and common pens.

Ans.: Expensive pens are not always the most comfortable. The aim should be to secure comfort first and appearance later. It is better to start with a moderate number of hogs at first until one becomes somewhat familiar with the business, increasing the size of the drove as occasion would seem to warrant. It is surely a mistake for a beginner to spend a very large amount of money on buildings before he sees his way out of the woods.

Room for Brood Sow.

How large a room would be best for a brood sow?

Ans.: Good brood-sow pens can be made six by eight feet with a pen in front of the same size which is not covered. Be sure to have a guard rail all around the pen if the sow is placed there before farrowing.

Sleeping Pens.

Should the sleeping pen be in the farrowing pen?

Ans.: The sleeping pen should be where the sow and pigs are kept, in the farrowing pen, until the pigs are large enough to run out. In front of that have a large feeding floor and a double door, which you can open and let the pigs run out. Provide a sloping floor where they farrow and sleep.

Pens.

Is it best to let hogs sleep and exercise all in the same pen?

Ans.: You can fall into no greater folly than to confine pigs to a pen. Exercise and fresh air are essentials to the feeding of animals. If you feed your hogs in a pen and do not give them exercise, and they have no access to the earth so as to get the phosphate from the ground by rooting, they will surely go wrong.

Hog House.

How shall I build a hog house for eight brood sows, one boar and the litters? I want feed room, sleeping room, feeding floors and farrowing pens.

Ans.: Build an out-of-door feed floor to feed on, portable farrowing pens for the sows at farrowing time, and a good, warm building about 16x24 for sleeping quarters for the sows and their litters after the pigs get a nice start in the spring.

Farrowing Pens.

How large should I make my farrowing pens? Of course, I mean to have but one sow in each pen at once.

Ans.: The farrowing pen need not be large, 10 feet square is ample but it should be where the sow will not be disturbed by other animals and if possible have it placed where she can have plenty of sunshine in her pen most of the day.

Bother by Wind.

Is there any danger that the wind will blow over the little individual farrowing pens?

Ans.: No. Have your yards well protected and there will be no danger.

Summer Shelter for Hogs.

I have a fine pasture for my hogs this year, but it is getting very hot and as there are no trees in the field I am afraid my hogs will suffer from the sun. What kind of shelter can I put up for them?

Ans.: A very cheap but effective shelter can be made by putting up a board roof supported by four posts in some corner of the pasture, or if you have a number of portable farrowing pens elevate them on posts about 3½ or 4 feet above the ground. Your hogs will soon learn to appreciate the shade they will thus make.

Ventilation.

What is a good way to ventilate?

Ans.: Ventilate a good deal as in a dairy barn, but these low hog houses so much in use can be ventilated by the door on top. If it is a warm day, those doors should always be open.

Windows in Hog Houses.

I am thinking of putting up a new hog house with glass all along the front and one side. It seems to me that there would be less danger of hogs taking diseases in winter if they could get more sunlight.

Ans.: Windows are necessary to admit light, sunshine and air, but too much window space lowers the temperature and would probably be more injurious than beneficial. It would hardly be economical to have so much glass in hog houses in this climate. You had better drop the glass front and side scheme and substitute windows instead. Keep your pens clean and use disinfectants liberally and you probably won't be troubled with much disease.

Hog House Floor.

I intend to build a hog house. What kind of floor should I put in, plank or cement?

Ans.: While cement is easier to keep clean it is generally supposed to cause rheumatism unless the sleeping quarters are kept well bedded. A combination would answer the purpose better than either one or the other. A tight plank floor under the bed with a cement floor in front of the troughs that has a slight incline to carry off the urine will be very nearly ideal. If you wish to use cement entirely you had better make a temporary board floor to lay over it in the sleeping quarters during the cold weather.

Floor for Hog House.

Which would be better, a slanting or level floor for a hog house?

Ans.: Have the floor slant very little. Just enough to drain the urine off is sufficient.

Feed Floor.

Is it a good plan to use a feed floor the year around to feed on?

Ans.: Yes. Have it protected from wind by a good windbreak of evergreen trees or a willow hedge. The floor itself should be surrounded by a tight high board fence or placed in the curve of a straw rick to protect the hogs from severe winds while they are eating.

The Feeding Floor.

Is it best to have a roof over the feeding floor?

Ans.: It is not necessary. Most breeders prefer to have it open to God's blessed sunlight.

Size of Feeding Floor.

How large a feeding floor would be required for 100 pigs?

Ans.: It should be at least sixteen feet wide and eighty feet long.

Feed Floor and Troughs.

Is a feed floor or a trough to be preferred where shelled corn is fed?

Ans.: A feed floor is better as the pigs would eat the corn altogether too fast to masticate it if it were fed in troughs. Where they have to pick up the kernels one at a time the mastication is perfect.

Sleeping on Plank Floors.

Does it injure a sow to sleep on plank floors?

Ans.: Not if they are bedded. Plank floors seem to be getting back into general favor with a large number of swine breeders, and are now quite generally used especially under the sleeping quarters. Dirt floors are unhealthy and cement floors often produce rheumatism or kindred troubles.

Plank Floors for Young Pigs.

Is it advisable to keep young pigs on plank floors, during the entire winter?

Ans.: No. Pigs should have warm, dry shelter, and a clean bed at nights in extreme cold and storm, and should have such a place at will, but they should not be deprived of out-door exercise. Give them a chance to run about during the day and they will be healthier for it.

Hog Pen Floors.

What kind of floors are the best for the hog pen?

Ans.: Dirt floors, board floors and cement floors have been used. The dirt floors become filthy and the cement floors give the hogs rheumatism. Board floors can be kept clean and are not so cold. The best wooden floors are made of double flooring with two thicknesses of tar paper between. Avoid any cracks where cold air can blow on your pigs or hogs.

Cement Floors.

Are cement floors good for pigs to sleep on? A neighbor of mine put in a cement floor last fall and it seems to me that his

hogs are about the most crippled up lot I ever looked at. Is the floor responsible for their condition?

Ans.: Never force hogs to sleep directly on a cement floor. They will usually be troubled with rheumatism or other similar ailments. A dust floor, on the other hand, is almost as bad, while the plank floor seems to solve the problem. A cement floor is all right for their feeding room if it is given a sufficient slant away from the trough, but it should never be used as a floor for the sleeping quarters. If your pens already have cement floors laid, build a plank floor on top of the cement where the sleeping quarters are to be.

Bedding for Hogs.

I have plenty of wheat, oat, rye, and barley straw all in good condition. Which straw makes the best winter bedding for hogs?

Ans.: Wheat straw undoubtedly makes the best bedding.

Bedding.

What is the best kind of bedding to use?

Ans.: Wheat straw, and not very much of that. Put in a few days before the sow farrows, so that she has that all compact for her nest. Only change often enough to insure a clean bed.

Oat Straw.

What is there about oat straw that makes it unhealthy for hogs?

Ans.: It is liable to give them skin disease. It makes them look kind of red and always sweaty. Use wheat straw if you have it.

Timothy Hay for Bedding.

Is timothy hay good for bedding?

Ans.: Timothy hay is very good but it is too expensive. Use wheat straw if you have it. Oat straw is apt to cause skin trouble and should not be used if you can get anything else that is suitable.

Barley Straw for Bedding.

Is barley straw good for bedding?

Ans.: It will do in the absence of something better but it is not so good as wheat straw.

Chaff for Farrowing Pen.

Would a little chaff or cut straw be better than wheat straw for the farrowing pen?

Ans.: If you put wheat straw in a few days before, the sow will cut it up so that there will be no danger of the little pigs getting mixed up in it.

Straw in Pens.

Is it best to put very much straw in the pens that are used for breeding purposes?

Ans.: Yes. Here is a good practice. A fortnight before a sow farrows put her into the open and feed her there mornings and nights but let her go along with the rest of the sows, so that she does not become scared. Do this up to within three days of farrowing, and then confine her in the stall all the time. A sow carries her young from 112 to 116 days at the outside. The sow knows that she has been treated well in that stall, and that there is no danger about it; and remember that the sow always looks out a secure place in which to farrow. The second day after you have confined her give her plenty of bedding and let her make her own nest. Of course, you may have too much bedding. You will have to use your own judgment about that and leave only what you think she should have.

Changing the Bedding.

How often should I change the bedding just after farrowing time?

Ans.: Every four or five days, and oftener if the sow and pigs are going in and out of the pen, tracking in mud and filth. Do not force them to lie on a wet bed. Change the straw as often as the state of the weather or the condition of the bed makes it necessary.

Salt for Swine.

I would like some advice as to giving salt to hogs.

Ans.: The salt can be mixed with the slop given. The results would probably be better if the salt was first dissolved in hot water when practicable. The dose required should be proportioned to the age and size of the animal. This can be determined by test. It is seldom that more than a few ounces should be given at once. If uncertain as to the proper amount to give, have the sale in a box by itself where the hogs can get it at will. They will never eat more than is good for them.

Salt for Hogs.

How should salt be fed to hogs?

Ans.: Hogs should always have free access to salt. When on pasture it is a good plan to spade in, from time to time, a lot of salt, especially if the soil is clay, and leave it in that state. Otherwise keep it in a dry place where they can get it readily.

Soft Coal for Hogs.

Will soft coal take the place of wood ashes for hogs?

Ans.: Most breeders prefer wood ashes. One trouble in feeding soft coal is that you are apt to expose your herd to hog cholera in feeding it, as it is frequently shipped in stock cars.

Ashes and Salt for Hogs.

Is it beneficial to feed ashes and salt to hogs?

Ans.: Ashes and salt are very beneficial,

as they keep the stomach in tone and increase the strength of bone in the animals.

Sulphur and Ashes for Hogs.

Are sulphur and charcoal or wood ashes good for hogs?

Ans.: If sulphur is used the hogs should have a very warm and dry pen, as it is dangerous to give it to hogs if the pen is wet and cold. The only good properties they get from the ashes are in the pieces of charcoal they find in it. A half teaspoonful of sulphur twice or three times a week to a fifty pound hog is a fair dose.

Best Wood for Charcoal.

What kind of wood is the best to make into charcoal for hogs?

Ans.: Maple would give you the best results. Have a place to put the charcoal where the hogs can always find it and you will have little or no trouble with scours or indigestion in your herd. Hard wood makes better charcoal than that made from some of the softer trees. Very good charcoal can be made from corn cobs.

Watering Hogs.

Do hogs require much water? I have a little run that goes through a corner of my hog pasture, and while the hogs go down there and lie down in the mud, to keep the flies off, I seldom see them drink.

Ans.: Give up that old idea that hogs do not require much water. The hog is constituted very much like the human being, and should always be provided with fresh water where he can get at it at will. If it is not convenient to have water where hogs can get it freely, then it must be carried to them regularly each day. Furthermore, hogs should always be watered in the evening, as they are apt to drink quite a great deal just before going to bed.

Automatic Waterer.

Can an automatic waterer be put in the sleeping room and does it work satisfactorily?

Ans.: It can, and works well with a little attention where it is kept sufficiently warm so as not to freeze.

Hog Rings.

Is it necessary to ring hogs?

Ans.: No, if you give them salt and charcoal there is no need to ring them. A hog roots simply because there is a want of phosphate to make bone growth. The higher you feed the hog the more he will root. If a man is under obligation to ring his hogs it is best to put a ring on each side of its nose; never put a ring in the center, because you will thus very often disturb the nerves that are connected with the eye and the brain. You will often notice that when you ring the nose right through the center the pigs will draw back from the trough.

Rings.

Should I ring pigs when on pasture?

Ans.: It is always best to ring brood sows before breeding them. Then they will not disturb the yard and pasture in the spring. Larger hogs may be ringed if they do much damage to pastures. Many breeders put two rings in their noses, one on each side of the center of the nose. Never ring pigs.

Age of Pigs at Market Time.

How old should pigs be and what weight should they attain at the time of marketing?

Ans.: On general principles a pig will pay the largest profit if sold by the time it reaches 200 pounds. If, however, pork should be high and corn low it would pay you to hold for heavier weight.

The Most Profitable Weight.

At what weight is it most profitable to sell hogs.

Ans.: That depends on the price of the grain and of pork and also the amount of feed on hand. On general principles a hog will make a more profitable gain before it reaches 200 pounds than after. Watch the market quotations and be guided accordingly.

Best Age for Meat.

I have some young pigs that I am going to get in good shape to kill for family use. At what age would they make the best meat?

Ans.: Properly fattened, a six months old pig makes the best meat. When they get older than that the quality begins to deteriorate and the proportion of fat becomes very much in excess of the lean.

Meat all Right.

I have had cholera in my swine herd recently. Is the meat of those not attacked all right for eating? Is meat of pigs crippled in hind feet good for eating?

Ans.: The meat from both hogs is perfectly healthy.

Meat not Affected.

We bought and killed a large sow that looked healthy, but when we opened her she had four or five gallons of water inside. Not in the intestines, but outside of them. The meat, heart and liver looked all right, but the kidneys were blistered. What was the trouble, and is the meat fit to eat?

Ans.: There is no reason why the meat should not be good. There was nothing of a contagious or infectious nature ailing the animal when butchered.

Boar Meat.

I have a boar that I want to dress in from four to six weeks. Should I castrate him now or will the meat be all right

if he is castrated just before being butchered?

Ans.: The age of the boar is not given. If under six months, it will be all right to kill him without castration. If much over that age a better quality of meat would be obtained by castrating him at once.

Keeping Pork.

Please tell me how to keep pork during the hot summer months.

Ans.: On the assumption that the pork has been killed in cold weather and properly cured, the best place to store pork is a dry cool place with sufficient circulation of air. If one fold of cotton is put around it and sewed so as to keep the flies out you should have no trouble. If you mean, how should pork be kept that is killed in hot weather, there is perhaps no better way than to salt it thoroughly and allow it to remain in salt in a cool cellar for about six weeks. Then smoke it and when dried wrap as described above.

Curing Meat.

How can I cure my own pork where I have only the common facilities of the farm?

Ans.: Handle your hogs carefully; catch and kill them just as quietly as possible, butcher just as cleanly as possible, see that the meat is chilled down to the freezing point for at least twenty-four hours; then cut up and salt, being careful to get it in nice shape, cut regularly and smoothly in every respect, cutting the ham off with a saw instead of an axe; use rock salt and let stand so the brine will escape. At the end of a week, salt again. Use granulated sugar before using salt but brown sugar will give good results. Later in the season dry and smoke for a short time, and if you wish to hold, pack the hams in a dry salt, being careful that the hams are dry when put away, or they will take up too much salt. Pack the side meat and shoulders in oats that have been run through a fanning mill and are clean. Be careful to put your meat away on a dry day, because if it is damp it will accumulate moisture and mould in the oats.

A Good Hog Fence.

How can I make a hog fence that will hold hogs?

Ans.: First set the corner posts very securely and brace them well. Then draw a barb wire tight along the ground. This will serve as a line to set the other posts by. This wire is left to keep the pigs from rooting under. Next set the intermediate posts one rod apart. Set the posts in the fall and let them freeze in. Put in a two-foot woven wire in the spring on a warm day before the ground thaws out. Each post is then as solid as a tree and the wire can be drawn as tight as desired. Next put on a second wire six inches above the woven wire and finish by a third barb wire breast high to keep out other stock. A fence made in this manner will last many years.

Hogs Eating Sand and Gravel.

Why do hogs eat so much sand and gravel?

Ans.: Your hog's digestive apparatus is out of order and you are feeding too high. Furnish them salt, charcoal and ashes with plenty of room for exercise and you should not be troubled this way any more.

What Killed the Pigs?

About the middle of April we had twelve sows come in with eighty-four pigs. They had been sleeping in the barn, but ran in a good pasture during the day. One night, as it was pleasant, we shut them all out in the pasture and let them sleep in the straw pile. Next morning there were dead pigs in the pasture, in the yard and in the barn. The pasture fence was not fixed at that time so the pigs could get out. Within 24 hours 27 of the biggest and best were dead. They did not struggle as if poisoned, but were stupid, lingered and died. It is a mystery to us. One man suggested that the sows got poisoned roots. In that case wouldn't the sows be poisoned?

Ans.: It was something they had eaten that caused their death. The sows could take enough of certain poisons to cause the death of the little suckling pigs without killing themselves.

Pigs Disappear.

I have lost several small pigs and do not know what becomes of them. Would it be possible for rats to kill and carry them away? By putting in a plank floor can I keep the rats out?

Ans.: It is quite possible that the rats have destroyed your little pigs, but it is more likely to be some larger animal. It would be well to put in a plank floor, but you had better build a pen so that no animals can get in.

Fresh Lime in Hog Houses.

Would it do any good to scatter fresh lime in hog houses?

Ans.: Yes, in warm weather. Scatter the lime in wet places that are apt to give off a stench, and a good coat of whitewash on the inside and outside of the hog house will help toward maintaining sanitary conditions.

Time to Care for Hogs.

How much of a man's time would it take to care for 150 hogs?

Ans.: On the whole, probably not more than one-fourth, if he is a good man.

Cause for Hogs Eating Ice.

Why does a hog eat ice when water is plentiful?

Ans.: Sometimes a hog will eat ice which is chopped from a trough to get the

ground feed that it contains. Other times they eat ice because they are feverish.

Can Land be Kept by Hog Raising.

Can land be kept fertile by raising hogs as well as by raising cattle?

Ans.: The ideal way to keep hogs and keep up a farm is to keep them in connection with the dairy. You could hardly keep up the fertility of a farm growing hogs alone.

What to do With the Runts.

Each year I have from eight to ten little runts. Is it well to allow them to run around with the rest of the swine, or what can I do with them?

Ans.: There is always one good thing about the runt. He makes a prime roaster. But the scurvy, sickly, runty pig should not be permitted to run at large with the rest of the herd. If a contagious disease comes into the neighborhood he is almost certain to catch it and spread it among the others. He should either be kept by himself or disposed of.

Cutting Pig's Tail Off.

Does it help a pig to fatten to cut its tail off when small?

Ans.: Better leave the pigs tail on, as it costs very little to grow it, and is a good thermometer to tell how your pig is doing and also comes in very handy at scalding time.

Sheep or Hogs?

Which would be the quickest way for a man with limited means to get a start, with sheep or hogs?

Ans.: Consult your own taste in the matter and decide to raise what you believe to be best suited to your own particular conditions. If you have no experience with sheep, you would make a serious mistake if you started in with them while prices are at the flood tide. If you have had experience with swine it would be better for you to continue with them at least until sheep take a drop in price.

Low Prices.

Hogs are pretty low, shall I stick or sell out?

Ans.: Keep right on just the same, only give your animals a little better care so that you can make a good, fair profit in spite of low prices.

Registering Swine.

Please tell me if pigs that are brought from another state can be registered here in Minnesota, and at what price?

Ans.: Swine, if purely bred, can be registered in the record to which they properly belong in any part of the United States. The same is true of any kind of pure-bred stock. In order to record them, you must first decide in what association you would have them recorded and then write to the secretary for blanks, which will give all information in regard to registration and prices. These we cannot give, as they vary with the different kinds of stock.

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